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1852
NUMBER

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No. 489. VOL. XXXV.

AUGUST 31, 1889.

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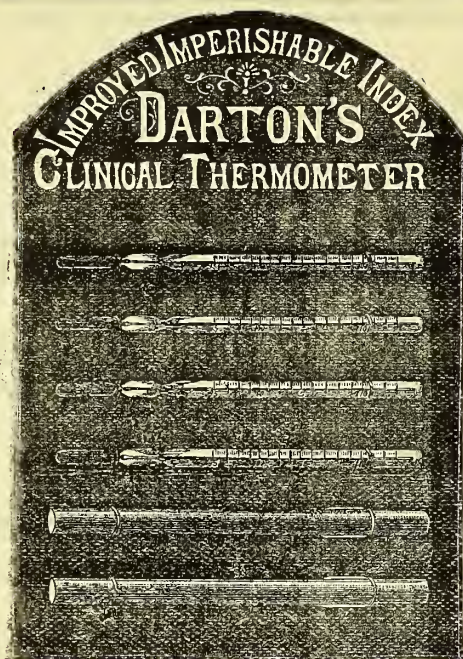
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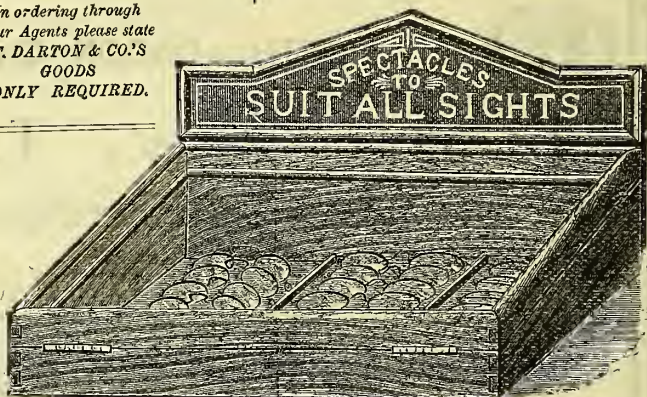
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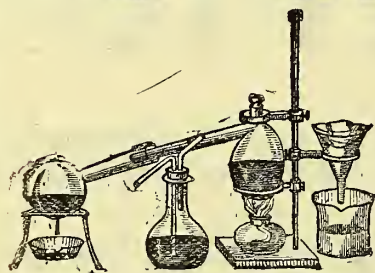
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THE NEXT SESSION (1889-90) will commence on Monday, September 2, and those intending to join the course, September to December, are requested to send in their names at once.

THE PAST SESSION has been a very successful one; out of 33 sent in for the "Minor" 25 have passed, as against 18 for the previous Session and 12 for the Session 1883-87.

SCHOLARSHIPS.—The Redwood Scholarship has been won by a pupil of the Liverpool School, Mr. E. B. Sherlock. . . . Two years ago a "Bell" Scholarship was won by another pupil of this school, Mr. W. A. Salter, who afterwards became Pereira Medalist.

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The Chemist and Druggist of Australasia.

The following are the principal contents of the July number:—

EDITORIAL NOTES.

The Centennial International Exhibition Medal—A "Person" in Tasmania (important decision under the Medical Act)—Friendly Societies in Victoria—Medical Practitioners on Counter Prescribing—The Pharmacy Board of Queensland—Artificial and Antipyrin—Strychnine in Snakebite—The New Zealand Medical Bill—Rabbit Poison—Expiring Trade Marks—Ana or AA.

COLONIAL REPORTS.

New South Wales.—Board of Pharmacy (official report of Monthly Meeting)—Pharmaceutical Society (official report of Monthly Meeting)—Comments on various matters—Miscellaneous and Personal Information—Trade Changes.

New Zealand.—Pharmacy Board (report of Monthly Meeting)—Midland Pharmaceutical Association of New Zealand (official report of Special Meeting re Medical Bill)—Reports on pharmaceutical matters, &c., from Auckland, Christchurch, and Timaru—Trade Items.

Queensland.—Pharmacy Board (official reports of Special and Monthly Meetings)—Text of the first report of the Pharmacy Board of Queensland presented to both Houses of Parliament—Pharmaceutical Society (official report of Monthly Council Meeting)—The Editor in Brisbane.

South Australia.—Pharmaceutical Society (official reports of Monthly Council and General Meetings)—Miscellaneous Information and Trade Changes.

Tasmania.—Launceston Pharmaceutical Association (report of Special Meeting)—Full report of Important Case, "The Launceston Pharmaceutical Association v. Launceston United Friendly Societies' Dispensary"—Trade News.

Victoria.—Pharmacy Board and Pharmaceutical Society (reports of Monthly Meetings)—Friendly Societies in Victoria (report of case, "The Pharmacy Board of Victoria v. The Bendigo United Friendly Societies' Medical Institute and Dispensary")—General and Trade Notes.

Books Received—Correspondence—Patents applied for in all the Australasian Colonies.

Copies may be obtained at the London Office, 42 Cannon Street, E.C., 6d. each, or the journal will be supplied to subscribers to THE CHEMIST AND DRUGGIST at 5s. per annum, post free.

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Literature.

The Chemist and Druggist, years 1886, 1887, 1888; lot 13s. 6d. Stead, Freshfield, Liverpool.

Pharmaceutical Journal posted every Thursday in exchange for *The Chemist and Druggist* posted same date. Dr. Storer, Sandy, Beds.

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Good microscope, 30 interesting slides, and Hogg's "Manual Microscope" (together worth about 6l.), in exchange for good magic lantern or medical works. Jones, Chemist, Towyn.

Jubilee silver and Lipscombe's terra cotta filter; cash offers, or exchange Burrough's quart tincture-press, Freeman's chlorodyne, (2s. 9d.), saleable patents, music "Yeoman Guards." 74/38.

Under cost, to clear.—23 lbs. gum arabic, small, but true, 2s.; suppository mould, 6-15 grain, plated as Maw's, 5s.; 5 gross 3lj. syringes in turned wood cases, 27s., loose, 15s. doz.; vagina tubes (Higginson's), 3s. 6d.; one gross catheters, black, double web, best make, 9s. doz., cost double; 2 gross 2-oz. pomade bottles, nickelled screw-caps, 13s. gross; packages free, cash with order. Gillman, 65 Kuston Road, N.W.

WANTED.

Freeman's chlorodyne, 2s. 9d. 74/38.

Burnisher for cabinet size. Blankley, Chemist, Arnold.

Nest of small drawers for warehouse; cheap. Ce'andine, Hereford.

Two old London Pharmacopœias, Latin. Rose, 6 Harrowgate Road, N.E.

Plaster or terra-cotta leg, for showing stocking in window. Curtis, Ealing.

A quart tincture-press; state size, price. J. P., 144 Mill Street, Ancats, Manchester.

To purchase Chemist's entire stock. Address "Dealer," 42 Cannon Street, London.

The Chemist and Druggist for 1888, for binding; also copy for January 5, 1889. 15/15.

Shop fittings, all descriptions, purchased for cash. Natali, 184 Aldersgate Street, E.C.

Copies of *The Chemist and Druggist*, January 5, 1889. Send to the Publisher, 42 Cannon Street, E.C.

Mirrored glass wanted, 20½ inches wide (pieces will do); total length, 6 or 7 feet. Brisley, Bexhill, Sussex.

Entire fittings chemist's shop, carboys, scales, mortars, and other requisites; cheap for cash. Morris, 6 Castle Street, Hastings.

"B.P.," 1885, Martindale's "Extra Pharmacopœia," Squire's "Companion," Beasley's "Receipt Book." Morris, 6 Castle Street, Hastings.

Address Wanted.

Will anyone oblige with address of Mr. F. W. Mylius, lately surgeon's assistant? George Brisley, Bexhill, Sussex.

BY ROYAL LETTERS PATENT.

HASSALL & CO.'S PHOSPHO-CITRIC ACID

Is the Best, Purest, and most Economical Agent for Acidulating all Saccharine Beverages.

Price only **10d.** per lb., in 9 and 18 gallon casks ; **1s.** per lb. in small quantities.

One Ounce Measure is equal to One Ounce of Citric. It produces a higher class Beverage, and shows an economy of between £6 and £7 per cwt.

We do not ask for an order, we merely solicit the favour of a trial.

3-oz. Sample for Postage (3 stamps), or 14 lbs. on approbation.

PAMPHLET GRATIS.

UNSOLICITED TESTIMONIALS.

We are pleased to be able to testify that your Phospho-Citric Acid is satisfactory under the most severe trials. We have placed Manufactured goods in which your Acid was used in a refrigerator for months, and also for nine months in a stove in which the temperature stands at over 150° day and night, and the bottles when examined to-day were as bright as the day they were put in. _____, LONDON.

I have pleasure in bearing testimony to the fact that first-class waters are produced, with greater body and finer fruity flavour, at half the cost of Citric; and further that your Acid is free from all traces of **LEAD**, generally found in the crystals. I am persuaded that your Acid will ultimately command the Mineral Water Trade. _____, LEMON STREET, ABERDEEN.
Yours faithfully, WM. THOMSON.

"And may I also be permitted to add my testimony to the excellence of your Phospho Citric Acid; I consider it far and away preferable to Citric." _____, O. H. ORTON, STOKES GOLDING.

FERMENTATION.

When Fermentation is present, Saccharine Beverages made with this Acid will keep sound and bright several days longer than those made with Crystal Acids.

HASSALL & CO.
YORK ROAD, KING'S CROSS, LONDON.

TELEGRAMS:—"REMPUJARON LONDON."

EIGHT PRIZE MEDALS AWARDED

GOODALL'S HOUSEHOLD SPECIALITIES.

YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each

GOODALL'S BAKING POWDER.

The Best in the World. 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

GOODALL'S EGG POWDER.

One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s., and 5s. Tins.

GOODALL'S CUSTARD POWDER.

Delicious Custards without Eggs. In Boxes, 2d., 6d., and 1s. each

GOODALL'S BLANCMANGE POWDER

Delicious Blancmange in a Few Minutes. Boxes, 6d. and 1s. each.

GOODALL'S QUININE WINE, B.P.

Best Tonic yet Introduced. Bottles, 6d., 1s. and 2s. each.

GOODALL'S GINGER-BEER POWDER.

Makes the Best Ginger-Beer. Packets, 3d. and 6d.

GOODALL'S BRUNSWICK BLACK.

For Painting Stoves, Grates, Iron, Tin, &c. 6d. and 1s. Bottles

GOODALL'S LAVENDER WATER.

A Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each

GOODALL'S PLATE POWDER.

For Polishing and Cleaning all Metals. Boxes, 6d., 1s. and

GOODALL'S JELLY SQUARES.

Make a Delicious and Nutritious Jelly. In $\frac{1}{2}$ - and 1-pint boxes, 3d. and 6d. each.

PROPRIETORS—GOODALL, BACKHOUSE & CO., LEEDS.

PATENT MEDICINES

AND

DRUGGISTS' SUNDRIES.

Monthly Price List of Patent Medicines, Druggists' Sundries, &c., will be sent post free on application to

GOODALL, BACKHOUSE & CO., LEEDS.

10

TO THE

CHEMISTS & DRUGGISTS OF GREAT BRITAIN.

TELEGRAPHIC ADDRESS:

COLEMAN,

GEORGE'S, NORWICH.

St. George's, Middle St.

NORWICH,

December, 1887.

The Excise Authorities having created a difficulty as to the sale of Medicated Wine containing a certain percentage of alcohol, we obtained in January last, from the Inland Revenue Authorities, permission to sell our Liebig's Extract of Meat and Malt Wine, **WITH QUININE**, without a Wine Licence, and many Chemists not holding a Wine Licence have sold considerable quantities. In order further to meet the requirements of the trade, we have introduced a Liebig's Extract of Meat and Malt Wine, **NON-Alcoholic**, made from the juice of the Grape, Liebig's Extract of Meat, and Extract of Malt. This also can be **SOLD WITHOUT A WINE LICENCE**. Your orders will oblige either direct or through the Wholesale Houses.

Yours obediently,

COLEMAN & CO., LIMITED.

*N.B.—The Wine is sold in Bottles, 2/9 and 4/6 each.
Trade prices on application.*

P.S.—Where the Magistrate's Certificate is not held we are willing to pay the entire cost of a Retail Certificate (the holder of which can sell any kind of Wines) if an assorted order of 6 dozen is sent us of any of our preparations. List on application. Our Liebig's Extract of Meat and Malt Wine **WITHOUT QUININE** commands a very large sale, and is recommended by over one thousand medical men who have sent us testimonials in its favour.

SOLE MANUFACTURERS—

COLEMAN & CO., LIMITED,

ST. GEORGE'S, NORWICH,

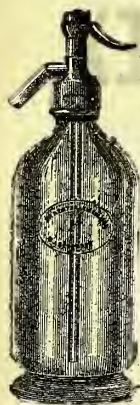
AND 3 NEW LONDON STREET, LONDON, E.C.

146 MINORIES LONDON E.C.
New York
Sydney
&c.

SODA WATER MACHINERY
AND ALL ACCESSORIES
FOR THE TRADE

BRATBY & HINCHLIFFE
HEAD OFFICE
SANDFORD ST. ANCOATS, MANCHESTER.

BOXES BOTTLES MACHINERY
ESSENCES
Catalogues, Circulars, Testimonials
Post Free

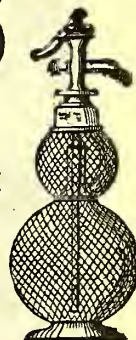


SYPHONS & SELTZOGENES

GREAT REDUCTION IN PRICE.

We have recently been entrusted with a most important Agency for the above-named goods. Our Principals are the best known firm in Paris, and the Syphons are undoubtedly the cheapest and strongest in the market. The tops are made of pure English Tin, guaranteed free from lead. The Seltzogenes are made on the well-known "Fevre" system, and each one is thoroughly tested before being sent out.

WE CAN GIVE TO LARGE AND SMALL BUYERS EXCEPTIONALLY LOW PRICES.
PLEASE WRITE US AT ONCE FOR PRICES, STATING QUANTITY OF EACH KIND REQUIRED



SODA-WATER MACHINERY.

MELBOURNE EXHIBITION, 1889, UNPRECEDENTED SUCCESS.

We have obtained at the above Exhibition

3 HIGHEST AWARDS POSSIBLE

A feat never accomplished before by any other house supplying requirements for the Aerated Water Trade.

These awards will carry with them **THREE GOLD MEDALS**, which were awarded as follows:—

- 1st—SODA-WATER MACHINERY (Highest Award possible).
- 1st—ESSENTIAL OILS & FRUIT ESSENCES (Highest Award possible).
- 1st—PATENT AND ORDINARY BOTTLES (Highest Award possible).

WRITE FOR NEW ILLUSTRATED CATALOGUE, POST FREE.

BRATBY & HINCHLIFFE,

Aerated Water Engineers and Glass Bottle Manufacturers,

SANDFORD ST., ANCOATS, MANCHESTER,

And at 146 MINORIES, LONDON, E.C.

CAUTION.

ENO'S "FRUIT SALT."

NOTICE IS HEREBY GIVEN, that we will immediately instruct our Solicitors to proceed against anyone infringing our rights, or attempting any colourable imitation of our Labels or Wrappers.

August 6, 1889.

ENO'S "FRUIT SALT" WORKS, LONDON, S.E.



PASCALL'S GOLDEN MALTEX

PATENTED.

Contains 25% of Allen & Hanburys' Extract of Malt.
A NOVEL CONFECTION. — MOST SALEABLE.
Delicious Flavour. Brilliant and Attractive Appearance.
SELLS AT SIGHT.

Vide Dr. Tanner's Report, and The Chemist and Druggist, April 20th.

1/- Bottles, 9/- per doz.; 1-lb. Bottles, 22/- per doz.; 1-lb. Tins, 20/- per doz.
and in 4-lb. Jars, 1/6 per lb.

OF ALL WHOLESALE HOUSES, OR OF THE MANUFACTURER,

JAS. PASCALL, BLACKFRIARS ROAD, LONDON, S.E.



CHEMISTS AND DRUGGISTS

DESIROUS OF SECURING

A VALUABLE AGENCY

SHOULD SELL THE

"SPRING BLOSSOM" CEYLON TEA.

Read what our Agents say about it, and *notice the recent dates of the following Unsolicited Testimonials,*
which may be seen on application at our Offices:—

April 22, 1889.—"I find it much liked in this neighbourhood."

April 8, 1889.—"I find 'Spring Blossom' is giving general satisfaction."

March 10, 1889.—"I find that your Tea is much appreciated, and sells well."

March 30, 1889.—"My customers have taken to the 'Spring Blossom' Ceylon Tea in a most surprising manner. It seems to give general satisfaction."

March 20, 1889.—"A lady customer of ours says 'She never tasted nicer Tea in all her life.'"

March 7, 1889.—"My customers seem to like your Tea very much, in every instance purchasing the same again."

January 8, 1889.—"Your 'Spring Blossom' seems to take well in this neighbourhood, and hope we shall continue to be your only agent in this place—several of our customers will have no other."

December 14, 1888.—"My customers speak very highly of your Teas."

December 11, 1888.—"I find the sale is increasing every week, and my customers all say they like it."

December 8, 1888.—"I find the 'Spring Blossom' still holds its own, and gets me new customers by recommendation, which is a most pleasing fact. Once tried invariably used."

November 29, 1888.—" . . . in conclusion, I may say that we have been in the grocery line over 17 years, and we have never found any Teas to equal yours, value for value."

October 30, 1888.—"I find the 'Spring Blossom' gives general satisfaction."

October 23, 1888.—"It is taking very well in this quarter, and everyone seems very well pleased with it."

October 18, 1888.—"My trade in 'Spring Blossom' is increasing."

September 28, 1888.—"My customers say it is the best Tea they ever drank at the price."

September 4, 1888.—"The 'Spring Blossom' is selling very well."

August 20, 1888.—"I am glad to say it continues to give great satisfaction, and I am gaining a number of new customers by the sale of it."

AGENTS WANTED WHERE NOT REPRESENTED.

Samples and Terms post free (set of Three 1-lb. Samples post free for 2/), sells Retail at 2/, 2/6, and 3/.

CAVE, JOHNSON & CO., Wholesale Tea and Coffee Dealers, **8 LIME STREET, LONDON, E.C.**

TO AERATED WATER MANUFACTURERS

HAY'S

SOLUBLE ESSENCES

ARE GUARANTEED TO BE THE FINEST IN THE MARKET

Honourable Mention: International Food Exhibition, Agricultural Hall, London, Oct., 1880. Gold Medal: Soc. of Arts, Paris, 1883

HAY'S SOLUBLE ESSENCE OF JAMAICA GINGER,
A Pure Essence of the Finest Ginger.
Trade Price 5/ per lb.; 12 lbs. and upwards, 4/6.

HAY'S FORTIFIED ESSENCE OF JAMAICA GINGER,
For First Quality Ginger Ale.
Trade Price 5/6 per lb.; 12 lbs. and upwards, 5/.

HAY'S GINGER ALE EXTRACT,
For Second Quality Ginger Ale.
Imparts Pungency, Colouring, great Brillancy, and an unusually Fine Ginger Flavour and Aroma.
Trade Price 4/8 per lb.; 12 lbs. and upwards 4/.

HAY'S GINGER ALE ESSENCE,
For Third Quality Ginger Ale.
This Essence makes a beverage that is unsurpassed by the so-called finest Belfast Ginger Ale.
Trade Price 9/ lb.; 12 lbs. and upwards, 8/6.

THESE ESSENCES
Have obtained the Highest Testimonials from all the Medical Journals, and from the Principal Trade Journals in this and other countries.



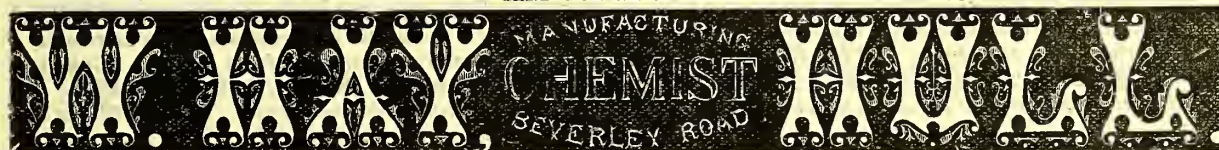
REGISTERED
For ORANGE, VANILLA and all other Essences,
SEND FOR PRICE LIST.

HAY'S HOP ALE ESSENCE,
For the manufacture of the Finest Aerated Hop Ale. This Essence is made from the choicest Hops grown, and is unrivalled for its peculiarly fine Hop Flavour and Aroma. Hop Ale made from this Essence has the full flavour of the finest Hops, and is a really appetising Bitter Beer.
Trade Price 8/6 per lb.; 12 lbs. and upwards 8/.

HAY'S SOLUBLE ESSENCE OF MESSINA LEMONS.
No. 1. Highly Concentrated.
Trade Price 8/6 per lb.; 12 lbs. and upwards 8/.

HAY'S SOLUBLE ESSENCE OF MESSINA LEMONS;
No. 2. Makes an exquisitely fine Lemonade.
Trade Price 6/6 per lb.; 12 lbs. and upwards 6/.

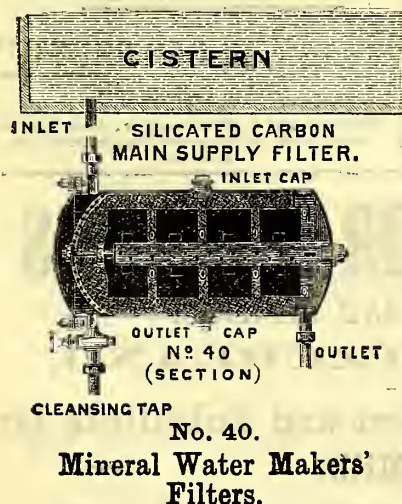
HAY'S LEMON FLAVOUR.
Imparts a Lemonade all the Fine Aroma and Flavour of the choicest Lemons.
Trade Price 5/ per lb.; 12 lbs. and upwards 4/6.



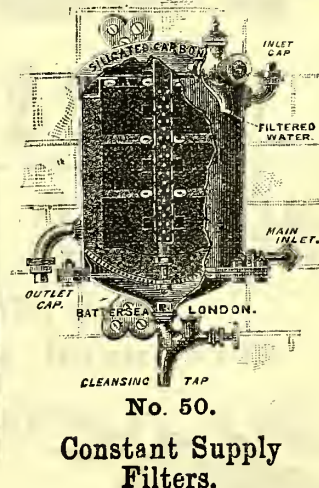
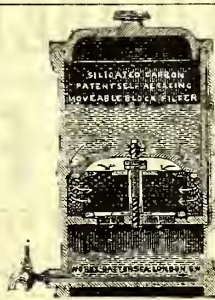
SILICATED CARBON

PATENT SELF-AERATING MOVABLE BLOCK

FILTERS.



By the use of these Filters, which are of every day sale, the Flatness of Taste so common in Filtered Water is entirely obviated.



WRITE FOR FULL ILLUSTRATED PRICE LISTS AND TERMS TO THE
SILICATED CARBON FILTER CO., BATTERSEA, LONDON, S.W.



ROBINSON'S LIEBIG'S BEEF WINE.

Composed of Liebig's Extract of Beef, Extract of Malt,
and sound Port Wine.

REPORT ON BEEF WINES.

From the results of my Analyses of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. ROBINSON, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.

WILLIAM ELBORNE, F.C.S., F.L.S.,

Lecturer on Materia Medica in the Owens College, Manchester (Victoria University),
December 15, 1888.

ROBINSON'S ORANGE WINE.

Specially prepared for Quinine Wine, does not deposit, will keep good in any climate, and well adapted for Export Trade. Supplied in Cask containing 9, 18, 30, 60, or 120 Gallons. Terms on application. [2]

PHARMACEUTICAL SHERRY WINE.

This Wine is well adapted for Pharmaceutical Preparations, and is the strength ordered by the B.P. Price, in 6-Gallon Casks, 5/6 per gallon; in 2-Gallon Jars, 6/- per gallon, carriage paid. Casks charged 7/6, Jars 2/6, and allowed if returned. Cash or satisfactory reference to accompany order.

B. ROBINSON, Distiller and Brewer of British Wines, Church St., Pendleton, Manchester.

THE KAISER'S COCOA.

MEAT. PEPTONE. COCOA.

This Preparation of Cocoa and Peptonised Meat Extract forms one of the most powerful concentrated foods known; it is indispensable to invalids, a boon to the healthy, and to those of a weak digestion. From its richness in nitrogenous principles (21 per cent.), it contains all the elements of tissue muscle, and blood formation, in a form ready to be assimilated at once, being predigested. In Powder for Breakfast, &c., or in Tablets.

As taken by the late *EMPEROR FREDERICK* on the recommendation of *Dr. Leyden*.

PERFECT FLAVOUR. NO OBJECTIONABLE TASTE. EASILY DIGESTED.

Price 1s. 6d. per Tin. "The article is in every way of satisfactory quality."—*British Medical Journal*. Price 1s. 6d. per Tin.

Sole Agents—SCHEIBLER BROS. & CO., 23 New Broad St., E.C.

TOBACCO

CIGARS & CIGARETTES.

M. & R. PEACOCK,
Tobacco, Cigar, & Cigarette
Manufacturers,
KINGSLAND RD., LONDON, N.E.

Sole Manufacturers of the Celebrated
Brands—

"ROYAL CHARTER"

AND

"UPPER CRUST."

Sold in Packets only.

Those who deal in these Goods, or intend doing so,
should write to the above Manufacturers for
Price List.

NESTLE'S MILK FOOD FOR INFANTS.

ALSO WELL ADAPTED FOR CHILDREN AND INVALIDS.

Prepared at VEVEY, SWITZERLAND.



The only Perfect Supplement and Substitute for
Mother's Milk.

Easy of Preparation—requires merely the addition
of water.

UNIVERSALLY RECOMMENDED BY PHYSICIANS.

TOWER TEA

A MOST VALUABLE AGENCY.

REGISTERED.



Tower Tea

NOTE. These Trade Marks appear on every Package.

WHERE VACANCIES MAY EXIST, AGENTS ARE APPOINTED BY
THE GREAT TOWER STREET TEA COMPANY, LIMITED,
5 JEWRY STREET, LONDON, E.C.



TRADE MARK.

KANGRA VALLEY INDIAN TEA GROWERS' ASSOCIATION.

French & Langdale, 14 St. Dunstan's Hill, London, E.C.

Guaranteed to be Absolutely Pure, as supplied to Europeans in India.

Packed in 1-lb., ½-lb., and ¼-lb. Metallic Air-tight Packets.

No. 1, Orange Pekoe, at 4/ per lb. No. 2, Pekoe, at 3/ per lb. No. 3, Pekoe Souchong, at 2/6 per lb. No. 4, Souchong, at 2/ per lb.

Export Prices in Bond, 6d. per lb. less than above, in Chests of 50 lbs. and upwards, shipped free of charge. Wholesale Discount on Nos. 1, 2, and 3, 17½ per cent.; on No. 4, 12½ per cent. 50 lbs. Carriage Paid. No Travellers employed. Tasting Samples on application.

These Teas are recommended to Chemists not only on account of their Purity, but because they are Less Astringent than other Indian Teas.

MADE INSTANTLY IN CUP OR TEAPOT.

A Digestive

SANTHA

Extract of Tea.

"The aroma and the caffeine are preserved, and the tannin is neutralised and rendered innocuous."—*Lancet*, May 4, 1889.

THE ONLY SAFE TEA FOR WEAK DIGESTION.

In bottles, price 1/ and 2/6; Samples 6d. each. Wholesale Agents—BARCLAY & SONS, Lim., Farringdon Street.

* * A LARGE SALE MAY BE EFFECTED AMONGST DYSPETIC CUSTOMERS.

WILKINSON'S COMPRESSED HOPS

Best Hops compressed into small parcels of one pound and half-pound, and sent out in cases containing 30 lbs. each. These hops are specially selected and compressed for keeping purposes, and will retain their aromatic strength for a considerable time. They are introduced to the public to enable them to make their own HOP BITTERS, YEAST, HOME BREWING, and numerous other purposes. Full particulars given in each packet. Samples and Prices sent on application to

A. WILKINSON & SONS, 37 Canning Place, LIVERPOOL.

P.S.—Chemists will naturally see the great advantage in making their own Bitters from the Pure Hop itself. Dealers in every description of Isinglass.

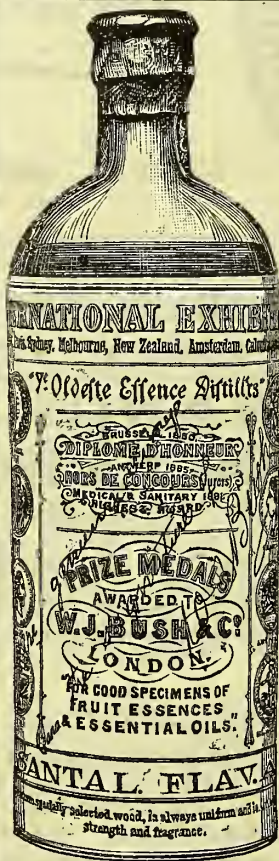
W. J. BUSH & CO.'S

PHARMACOPŒIA

ESSENTIAL OILS.

Packed in Original 1-lb. Bottles.

Ol. Anisi Ang.
Ol. Amygd. Essent. Ang.
Ol. Anethi Ang.
Ol. Anthemid. Ang.
Ol. Carui Ang.
Ol. Caryoph. Ang.
Ol. Cinnam. Ver. Ang.
Ol. Copaibæ Ang.
Ol. Coriand. Ang.
Ol. Cubebæ Ang.
Ol. Juniperi Ang.
Ol. Menthæ Pip. Ang.



Ol. Myristicæ Ang.
Ol. Pimentæ Ang.
Ol. Santal. Flav. Ang.
ALL OWN DRAWING.

Ol. Bergamot, Extra
Ol. Eucalypti, Extra
Ol. Lavand. Flor., Extra
Ol. Limonis, Extra
Ol. Rosmar., Extra

DIRECT IMPORTATION.
Specially Selected.

It is imperative that Chemists and others requiring Essential Oils for medicinal purposes should purchase genuine and finest qualities only. These can only be obtained from W. J. BUSH & CO., who supply them as above, in 1-lb. Bottles, and guarantee their quality and purity. *Nearly all Essential Oils offered in the Market are impure.*

W. J. BUSH & CO.
MANUFACTURING CHEMISTS, DRAWERS OF ENGLISH ESSENTIAL OILS,
Artillery Lane, LONDON. Works—Ash Grove, HACKNEY. [2]

A WONDERFUL SUCCESS!!

NON-INTOXICATING BEER

Made from MASON'S Original

EXTRACT of HERBS

(REGISTERED.)

Composed of Yarrow, Dandelion, Comfrey, & Horehound.
ENLARGEMENT OF SIZE.

A Sixpenny Bottle makes EIGHT GALLONS of
HERB OR BOTANIC BEER

A NON-INTOXICATING BEVERAGE
Full of Body and Flavour, with a Creamy Head like Bottled Ale, the most
perfect substitute for Alcoholic Drinks ever discovered, for either
Summer or Winter.

BEWARE of mean and fraudulent imitations.

BEWARE of others copying our title.

MASON'S is the original and only genuine.

MASON'S is a Special Compound entirely from Herbs.

NO OTHER EXTRACT MAKES BEER LIKE IT.

Sold in Bottles at 6d., 1s., & 2s. each, with directions.

MASON'S WINE ESSENCES

Make Temperance Wines in a few minutes.

Ginger, Orange, Lemon, Raspberry, Black Currant, &c.

These are having a very large sale now, and are extensively advertised.

Sold in Bottles at 6d., 1s., and 2s. each.

Quotations on application.

SOLE INVENTORS &
MANUFACTURERS:

NEWBALL & MASON,

Manufacturing Chemists and Botanic Druggists, NOTTINGHAM

TYRER'S SAUCES

GOOD
VALUE

AND "BOROUGH" KETCHUP

THE GIANT 1d. BOTTLE OF SAUCE
LARGEST IN THE TRADE.

In Half-Gross Boxes, at 6/6 per Gross.

"BOROUGH" KETCHUP, WORCESTER, HARVEY, YORKSHIRE
OR READING SAUCE.

1d. Sample Bottles, dozen parcels	per gross 5/ extra quality	5/
1d. Giant Bottles, dozen parcels	per gross 5/	5/
1d. Bottles (flat or round), reputed 1-pint	per gross 5/	5/
1d. Bottles (flat or round), reputed pint	per gross 5/	5/
1d. Imperial Round Stoppered Bottles	per gross 5/	5/
1d. Imperial	per gross 5/	5/
12-gallon Casks (casks free)	per gross 5/	5/

ROYAL CAFÉ SAUCE.

In 8-oz. square-stoppered bottles, 48/ per gross.
A rich, fruity Sauce of fine flavour, and worth especial attention, as being the most saleable in the market.

Samples of any kind Sent Free of all Cost by

PETER TYRER,

The "Borough" Ketchup and Sauce Maker,

70 LONG LANE, BOROUGH, LONDON, S.E.


SCOTCH AGENCY: WEST NILE STREET, GLASGOW.

Also Sold by W. & C. PANTIN, Upper Thames Street, LONDON, E.C.

BURGOYNE & CO., 16 Coleman Street, London, E.C.

JOS. TRAVERS & SONS, 119 Cannon Street, London, E.C.

PEPTONATE OF IRON



SOLE MAKERS

PEPTONE OF MEAT

DENAYER'S

LIQUID PEPTONES

STERILIZED

Free from microbes!
Keep good for ever in all climates.
118 BISHOPSGATE STREET WITHIN, LONDON, E.C.

A bland, non-irritating and most easily assimilable ferruginous preparation.
For debilitated constitutions, children, and aged people.
A powerful restorative for all ailments of the stomach, stimulates general nutrition.
Is retained when the stomach rejects all other food. Pleasant to taste.
Of all Chemists and Wholesale Houses.

MILLAR'S BRITISH WINES.

ORANGE (suitable for Quinine), GINGER, RAISIN, COWSLIP, CHERRY, &c.

A. MILLAR & CO., Thomas Street, DUBLIN.

Sole Agents for London and District—H. J. ROYDANT & CO., 75 Acre Lane, Brixton, S.W.

"RAMORNIE." LIEBIG'S Extract of Meat.

As supplied to the War and India Offices.

1-lb. Jars.....per lb.	6/2	per doz.	74/0	2-oz. Jars.....per lb.	7/0	per doz.	10/6
1-lb. Jars....."	6/4	"	88/0	1-oz. Jars.....per lb.	7/8	"	8/6
4-oz. Jars....."	6/7	"	19/0	1-oz. Jars....."	8/0	"	8/3

QUOTATIONS FOR EXTRACT IN "BULK" ON APPLICATION.
Write for Detailed Price List to the Australian Meat Co., 9 and 11 Fenchurch Avenue, E.C.

6 lbs. Carriage Free.

WILLIAM MATHER'S SPECIALITIES.

MATHER'S Nigrine, a Jet Black
Marking Fluid.

MATHER'S Fuller's Earth.

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MATHER'S Perfumes.

MATHER'S Cachou Lozenges.

MATHER'S "Prince of Wales"
Floats and Lights.

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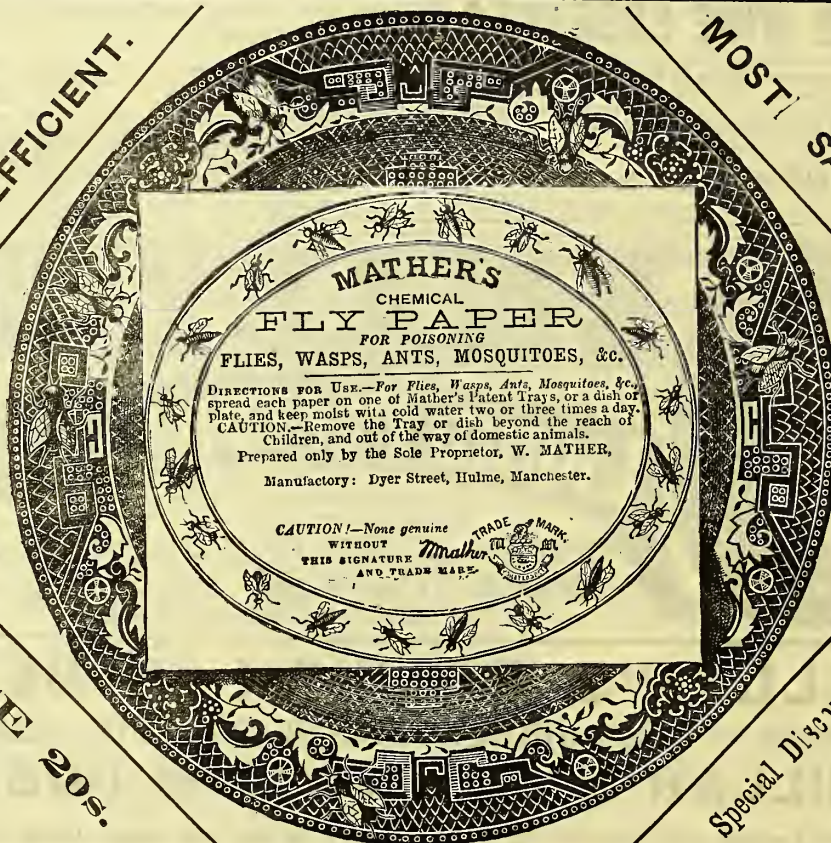
Mustard Plaisters.

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PRICE 20s.
Per 1,000.

Special Discount to Large
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WILLIAM MATHER,
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LONDON WHOLESALE AND EXPORT AGENTS:—

MESSRS. MACE & HALDANE, 94 Milton Street, London, E.C.

A Copy of this Supplement is inserted in every number issued of "The Chemist & Druggist."

The Chemist and Druggist

SUPPLEMENT

Businesses Wanted.
Businesses for Disposal.
Premises to Let.
Auction Sales.

SATURDAY, AUGUST 31, 1889.

Partnerships.
Situations Vacant.
Situations Wanted.
Miscellaneous.

This Supplement will be given free to any Chemist and Druggist or Assistant who will call for it at 42 Cannon Street on Friday afternoon, or will be posted on Fridays to any one who sends an addressed postal wrapper.

ADVERTISEMENTS for this Supplement can be received on FRIDAY MORNING, first post, though it is requested that these may be sent in as early in the week as possible.

EXCHANGE COLUMN ADVERTISEMENTS will appear on page 8 (bottom folio), and must be received not later than THURSDAY AT NOON, to appear in the issue of the Saturday following.

All Advertisements for this Supplement and Exchange Column must be prepaid. Remittances payable to EDWARD HALSE and crossed MARTIN & Co.

OFFICES: 42 CANNON ST., LONDON, E.C.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1846, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—LONDON, E.C.—Retail and Dispensing Business, with Wine Agency, situated in a thickly populated locality; returns £1,450; large shop (corner), well fitted and heavily stocked; about £800 required; reasonable offer entertained; part by instalments if wished.

2.—LONDON, E.—Death vacancy; good-class Dispensing and Prescribing Business; returns under manager £795; business can be much increased; well-fitted shop and good stock; any reasonable offer will be accepted.

3.—LONDON, N.—Good residential neighbourhood; select Dispensing and Retail; returns £650 yearly; well-fitted shop; good stock; large and convenient house; vendor, retiring from business, will give 12 months' introduction; reasonable terms can be arranged; full particulars on application.

4.—LONDON, CITY.—Central position, large thoroughfare; very profitable Dispensing and Retail Business; returns £900; handsomely-fitted shop; good stock; about one year's returns required; profits are above the average.

5.—CATHEDRAL CITY, WEST.—First-class Dispensing and Retail Business; held by vendor upwards of 16 years; receipts average nearly £1,150; net profit nearly £600; large handsome corner shop, convenient house; full particulars on receipt of wholesale reference.

6.—BUCKS.—Good family Business; returns about £700 yearly; well-fitted shop, good stock, large house, greenhouse, stable and coachhouse, &c.; immediate sale required; price £450; offer considered.

7.—SOUTH WALES.—Very profitable increasing Retail and Dispensing Business; returns nearly £500 yearly; large well-fitted shop and good stock; convenient house; price about £450.

8.—SOUTH OF ENGLAND.—Seaside; old-established Retail and Prescribing Business; would suit a surgeon; returns nearly £600 yearly; net profit over 50 per cent.; large house, and good garden; about £550 required, by instalments if required.

9.—EASTERN COUNTY.—General Retail and Mixed Business; established over 50 years; returns £1,200 yearly, with good profits; large shop, well-fitted, and good stock; about £850 required.

10.—MID-SURREY.—Good residential locality; retail and Dispensing Business; returns nearly £700 yearly; good profits; all first-class business; well-fitted shop and good stock; large house and garden; about £600 required.

11.—STAFFORDSHIRE.—Retail and Dispensing Business, with large proportion of Proprietary Medicines; returns £1,000 yearly; net profits above the average; good house attached; terms, small premium and valuation.

12.—EASTERN COUNTIES.—Good market town; Retail and Dispensing, with Post Office; returns average £510, not including post office salary; large house with garden; price to be arranged; easy terms to an immediate purchaser.

Gentlemen prepared to invest about £3,000 are invited to apply to Messrs. Orridge & Co., regarding several Country Businesses, Wholesale and Retail combined.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION. Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the especial attention of a London agent.

SPECIAL NOTICE.—TO PRINCIPALS AND ASSISTANTS.

MESSRS. ORRIDGE & Co. Register Vacancies for Situations FREE OF CHARGE.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

F. J. BRETT,
VALUER, LEICESTER,

60 St. Stephen's Road.

*References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.***BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS. 20 YEARS' EXPERIENCE.****LINCOLNSHIRE.**—Good-class Country Retail in pleasant market town; returns £1,200; price about £800; large and convenient house and premises.**SOMERSET.**—Light Retail, Prescribing, and Dispensing; no heavy trade; returns over £900; good house, small garden; sole cause of sale, illness; price £700.**LIVERPOOL.**—Returns £8 week; good position for new docks; good house; price £270.**CARDIFF (near).**—Light Retail, Prescribing, and Dispensing; returns £500; quite one-half profit; price £400.**LONDON.**—Light Retail and Surgeon's Wholesale; returns £3,000; net profit £700; price about £2,000.**LINCOLNSHIRE.**—Good market town; returns £400 to £500; price £250.**LONDON, S.W.**—Good-class Retail; returns £520, all full prices; price £350.**DERBYSHIRE.**—Light Retail and own Proprietaries; returns £300, increasing; shop well fitted; price £250.**MANCHESTER.**—Light Retail at good profits; returns £700; price £350, or valuation.**BUSINESSES FOR DISPOSAL.**

3s. 6d. for fifty words; 6d. for every 10 words beyond.

A **CHEMIST'S** Business for sale, situated in a splendid position; the lot to be sold for less than what the fittings cost. Apply to Bygrave, Shop Fitter, 111 Shepherdess Walk, City Road.**SUFFOLK.**—To Chemists and Dentists.—Small Business, in a good market and manufacturing town, with comfortable dwelling-house; rent £18 per annum; price £100. Apply to Wheeler & Westoby, Sudbury, Suffolk.**FOR** immediate disposal, a select Retail and Dispensing Business, well situated in an improving watering-place on the East Coast. For terms and particulars apply to Grimwade, Ridley & Co., Wholesale Druggists, Ipswich.**SOUTH HANTS.**—A Light Retail, Prescribing, and Dispensing Business for immediate disposal; returns over £350; rent £30. For full particulars, apply to "Opium," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**NORWICH.**—For immediate disposal a genuine old-established Business; returns about £1,100; well-fitted shop and good house; rent £42; small Branch attached; valuation. For particulars, apply to Smith & Sons, Wholesale Druggists, Norwich.**IMMEDIATELY.**—Must be sold, an old-established genuine Retail; very profitable, with a valuable Proprietary attached; good opening for Dentistry; price, valuation; small capital required; Home county. Address, A. Z., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**S.E.**—Handsomely-fitted corner Shop; returns £230; profits 75 per cent., could be greatly increased by good Prescriber and Dentist; price £95, or first reasonable offer; illness cause of disposal; rent £45; lease 15 years unexpired. Apply by letter to S., care of Mr. Beams, 39 Hardcastle Street, Peckham.**UNUSUAL** opportunity for early succession to the only Chemist's Business in a seaside town; over 2,000 inhabitants; increasing returns, soon reach £500 with other advantageous prospects; first reasonable offer accepted; satisfactory cause for selling. "Radix," care of Evans, Gadd & Co., 97 Fore Street, Exeter.**MIDLAND COUNTY.**—First-class Retail and Dispensing Business; returning £1,000 at full prices, and business of a most profitable nature; elegant fittings; heavy stock; lowest cash price £750; only requires to be seen; principals only. Apply to 27/146, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**DEATH VACANCY.**—A genuine Business is for disposal in a large village 40 miles from London; returns are £700; price to effect a speedy sale £400, the lowest the executors are prepared to accept; fair-sized house and garden. For further particulars, "Exor," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**CHEMIST** and Druggist's Business to be sold; undeniable position in densely-populated locality; capital house, which could be let off; shop with modern fittings; first-rate opening for an energetic man; rent £40; price £200, to include stock and all fixtures. Apply to Mr. Alfred Richards, Auctioneer and Estate Agent, Tottenham.**DEVON.**—St. Mary Church, one mile from Torquay.—A small Branch Business; Light Retail and Dispensing; good house and shop; rent £27; the business has been managed by female; could be considerably increased by personal attention, also by adding a Mixed trade; open and healthy situation; price about £150. Apply to Proprietor, 50 Union Street, Torquay.**MANCHESTER** (Suburb).—Prominent position; junction of five roads; Light Retail and Dispensing Business; returning £700, should do £1,000; net profit £300; patents almost nil; excellent residence; bath-room and all modern conveniences; price £550; handsome fitting and good stock. S., c/o Messrs. Berdoe & Co., 30 Jewry Street, Aldgate, London.

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MR. SYDNEY GREENWOOD,

TRANSFER AGENT, VALUER & ACCOUNTANT,

PITTVILLE HOUSE, Lea Bridge Rd., CLAPTON, N.E.

LONDON, E.C.—Returns £800; spacious premises; long lease at low rental; important corner position; offer wanted.**SUBURBS.**—Returns £480; net profits £300; post office pays £50; rent £21; good house and garden; wants seeing.**LONDON, N.**—Returns £700 by manager; thickly populated district; good house; price £400, to effect a sale.**BALL'S POND.**—Returns £300 by Minor, has done double; low rent; good house, private entrance and garden.**STAFFS.**—Returns £1,000; profitable mixed cash trade; rent £40; noble-looking house, well fitted; price £750.**BERKS.**—Returns £430; rent £45; dispensing and prescribing trade; good house, genteel locality; price £315.**HANTS.**—Returns £500; low rent; chiefly dispensing and prescribing; selling through infirmity; price £400; a bargain.

Others on application to Mr. Sydney Greenwood, as above.

BUSINESSES FOR DISPOSAL—Continued.**£150.**—London Suburban Business (Branch); under a Junior much neglected, doing £5 weekly; price £150; £50 down, balance by easy instalments; splendid chance for an energetic young man, as the business recently did double under another manager. "Pharmaceutical Chemist," care of Messrs. Hodgkinson, Preston & King, Bishopsgate Street, E.C.**SOUTH-EAST COAST.**—For immediate sale, old-established cash Retail, Dispensing, and Prescribing Business; returning £1,500; vendor, going abroad, will accept valuation of stock and fixtures, about £600; sure fortune to energetic man or two friends with moderate capital; every investigation allowed. "Mentha," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**LANCASHIRE.**—For disposal, in increasing and healthy locality, a genuine and select Retail and Dispensing Business; very good and spacious premises with gardens, &c., on lease; shop handsomely fitted in mahogany; price £400; particulars, with perfectly satisfactory reasons for disposal, given to bona-fide intending purchasers. Address, "Antipyrine," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**CHEMIST'S** Business for sale in Aldershot; established 28 years; retiring through age; population 12,000; Summer garrison 25,000 men, Winter 10,500, not including women and children; close to all barracks in South Camp; veterinary practice, also dental connection; four chemists, only one other open after 8 P.M.; good house, with cellar, garden, and back yard; price for stock and goodwill £250 or offer; assessed rent, £60 per annum. Apply, E. M., 25 Calthorpe Street, Gray's Inn Road, London.**OLD-ESTABLISHED** genuine Country Business in centre of large agricultural district; very healthy neighbourhood; dry, bracing air; comfortable, old-fashioned house; large garden; rent very low; mixed trade, profitable nature; compact premises; no opposition; returns increasing; expenses being very light, the net income is equal to much larger business in towns; as proprietor is taking larger concern, would accept £295 cash. F. S. H., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**EASTERN COUNTIES.**—An old-established Family Retail and Agricultural Business, with small Stationery, situate in the leading position of a pleasant market town surrounded by an important and populous agricultural district, where a large and lucrative trade has been carried on over 50 years; this is a genuine concern, open to the fullest investigation, and a splendid opportunity for a young and energetic man, willing to establish a large trade on the General Store principle; average returns last 5 years over £1,000 and an agency worth £25 per annum; cash required about £800; large shop and house, outhouses, and very commodious warehouses; rent £55. "Hemys," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**BUSINESSES WANTED.****WANTED,** a well-established ready-money Business in London; good price will be given for a really genuine and going concern, which could be worked without the entire attention of the principal; or a desirable Partnership would be entertained. Send particulars in confidence to 6 Railway Place, Fenchurch Street, E.C.**A** **LIGHT** Retail and Dispensing Business, in large town in Lancashire (Liverpool preferred); price from £300 to £400. "Chemist," 151 Oxford Street, Manchester.**WANTED** to purchase good going Drug Business in country town (England preferred); returns £600 to £700. Full particulars to 115/35, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**ONE** Guinea will be paid to anyone pointing out suitable spot to open Chemist's shop where small capital is required; or would buy small business. "Confidential," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TO LET.

SHOP to be let in main road; good opening for chemist; house contains double-fronted shop, shop-parlour, sitting-room, 3 bedrooms, yard with back entrance; rent £40. Apply to E. C. Ackermann, House Agent, Wimbledon.

SALE BY AUCTION.

SALVAGE CHEMICALS, DRUGS, OILS, ISINGLASS, &c.
MESSRS. BROWN, ROBERTS, RADMALL & CO. will SELL BY AUCTION, on the premises, 3 Jewry Street, Aldgate, E.C., on Thursday, September 5, at Twelve o'clock precisely, on behalf of the Insurance Companies, Salvage recovered from the late fire at Messrs. Balis Bros. & Co., Drug Merchants, Jewry Street, Aldgate, comprising about 100 boxes Barbadoes and Cape Aloes, a large quantity of Castor, Cod-liver, Salad, Almond, and other Oils, Citrate and Carbonate Magnesia, Acetic, Tartaric, and other Acids, Quinine, Eau de Cologne, Gums, Ginger, Rhubarb, Japan and Paraffin Wax, Beeswax, Gamboge, Glucose, Patent and other Medicines, Extracts, Tinctures, Infusions, Soap, Crystals, Bark, Seeds, Mineral Waters, and Scents. Also about 9 tons Isinglass, damaged by water, recovered from the premises of Mr. James Vickers, Isinglass Importer, 6 Devonshire Square, E.C., and removed to the London and India Dock Warehouses, Crutched Friars, and comprising Russian, Brazil, Penang, East India, Chinese, Manilla, in leaf, lump, cake, and pipes; empty casks, and numerous items. May be viewed the day preceding the Sale, and Catalogues had of Messrs. Brown, Roberts, Radmall & Co., 15 Austin Friars, E.C.

SALE BY TENDER.

F. J. BRETT is instructed by the owner to Sell by Tender the old established Business of Mr. J. Parkinson (who is entering the Wholesale), 11 Cross Cheaping, Coventry; the trade is Family Retail and Dispensing, with excellent Proprietary articles at more than the average profit; the shop is a prominent corner, 24 feet by 21, well-fitted and stocked; in busy thoroughfare and in good working order; the house is large and commodious, and held on long lease; to an enterprising man this presents an opportunity seldom occurring of securing a really good-class connection, with plenty of scope for increase, on exceptional terms. Tenders will be opened by F. J. Brett at Coventry, on Thursday, September 12, at 4 P.M., unless previously sold. Tender forms and all particulars can be had of F. J. Brett, Valuer, 60 St. Stephen's Road, Leicester.

FOR SALE.

FOR SALE, the entire second-hand Fittings of a Chemist's shop, including mahogany drawers, bottles, &c., for £25; particulars on application. Also nest mahogany drawers, 4 ft. by 4 ft., 45s.; ditto, 4 ft. 8 in., with shelving, 46 drawers, 75s.; 12 ft. range new mahogany drawers, glass labels and knobs, 190s.; sloping plate-glass case, 36 in. by 18 in., 35s.; counter, with mahogany top and drawers, 7 ft. long, second-hand, 30s.; handsome nearly new dispensing screen, 8 ft. 6 in. long, £10; 4 second-hand specle jars, 15s. each; bent-front brush case, 25s.; desk and glass case, 55s.; four 4-gallon carboys, 40s.; 180 new gold-labelled bottles and jars, 190s. R. Tomlinson & Sons, Medical Fitters, Bond Street, Birmingham.

PARTNERSHIPS.

PARTNER wanted, for the Wholesale Drug and Drapery trade; moderate capital required. Address, Mr. Flower, Accountant, 85 Winston Road, N.

PARTNERSHIP wanted by a thorough business man; thorough knowledge of the Chemist's and Dental Profession. Address, "Partner," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ADVERTISER, desirous of purchasing a share in an established business where he could act as Manager or Working Partner, invites correspondence which will be treated as confidential. Address, 29/89, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

APPRENTICESHIPS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED, a well-educated youth as Apprentice. Apply to H. W. Pound, Woodside Park Pharmacy, High Street, North Finchley.

WANTED, to place youth, aged 17, as Apprentice to Agricultural Chemist in small town. Apply, D. D., Temperance Hotel, Knighton, Rad.

WANTED, an Apprentice or Improver in a good-class Dispensing Business; every facility of acquiring thorough knowledge of the business. Apply, "Chemist," 165 Hagley Road, Birmingham.

WANTED to place as Apprentice (indoors) a well-educated son, 17 years, where one or more assistants are kept; passed Preliminary; Nonconformists and Wesleyans preferred. Address, with full, 11r every particular in order to lighten correspondence, William Butterfield Chemist, Blackburn.

AS Apprentice, a well-educated youth, in a fashionable seaside town in South Devon; good mixed business; moderate premium required; comfortable home. Apply to J. J. O. Evans, Dispensing Chemist, Teignmouth.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

IMMEDIATELY, for Mixed Retail in mining district, Junior Assistant wanted. Walker, Chemist, Brotton.

CHEMISTS, Qualified.—Active first-class men apply with all particulars to Scottish Drug Depot (Limited), Edinburgh and Leith.

WANTED immediately, a Junior Assistant, used to Dispensing. Apply, with usual particulars, to S. S. Stedman, Manor House, Weymouth.

WANTED, an Assistant, about 24 years of age, for two months, commencing the second week in September. J. Burton, Chemist, Llandudno.

AN Assistant, aged 24, Minor. State height, references, salary required, and enclose photo, to W. Baxter (late Downman), 160 High Street, Southampton.

WANTED, immediately, Improver or Junior for Drug Store trade; must be quick and obliging; aged 18 to 20. Apply, Mason & Co., King Street, South Shields.

WANTED, an Assistant, accustomed to a good-class country trade, by September 16th, capable to prescribe; indoors. Mr. Huntley, The Square, Wimborne.

WANTED at once, Junior Assistant for first-class Counter trade (outdoors). State particulars, with carte, to the South-Eastern Drug Company, Folkestone.

REQUIRED, a practical Pharmaceutical Assistant, knowing besides English Italian or French. Apply in Rome, G. Beretti, Reale Farmacista, Via Frattena 117.

IMMEDIATELY.—Wanted, for three or four weeks, an Assistant, for quiet country business, to take charge during principal's absence. Apply, H. St. Mary Cray, Kent.

FREDERICK JAMES LEA, The Folkestone Pharmacy, 43 Tontine Street, Folkestone, has a vacancy for an Improver or Junior. Apply with usual particulars, enclosing photo.

OUTDOOR Dispenser wanted immediately by a Doctor, in private surgery; ample time for reading. State age, experience, references, and salary required, to Dr. Pletts, Ryde, Isle of Wight.

WANTED, at once, a Junior Assistant. Apply, stating age, height, experience, and salary required, with photo, to be returned, and testimonials, to W. E. Stokes, High Street, Brompton, Chatbam.

COMPETENT Junior; indoors; Light Retail and Dispensing; good address; state age, height, experience, reference, salary, photo, with usual particulars and when disengaged. J. Marson & Son, Stafford.

A JUNIOR or Improver at once for Light Retail and Dispensing Business (indoors). Send photo (which will be returned), with usual particulars, to J. Tuttoy, The Market Pharmacy, Great Yarmouth.

SENIOR Assistant; indoors; age 30 to 40; a thorough responsible energetic man for a first-class West-End business. Apply by letter, with usual particulars, carte, and state salary required, to Edward C. Perks, 1 Sloane Square, S.W.

WANTED, competent Assistant; qualified for quick, pushing trade; one who can put some capital in the business; full particulars on application; please enclose photo, references, and state usual particulars. Drug Company, Limited, 10 Tontine Square, Hanley.

QUALIFIED Assistant, about 25, for pushing Retail; must have good address; accustomed to brisk middle-class trade; if suitable, will be given management of branch; no Sunday or night duty; first-class references required. Address, Boot's Drug Co., Limited, Nottingham.

WANTED, an Assistant, as Manager for Branch shop, not under 24, for a Family and Dispensing Business; must have had good experience, and able to furnish first-class references; personal interview or photograph necessary. Apply, A. Mays, 3 Market Place, South Shields.

ASSISTANT for a Light Retail and Dispensing Business; good address; thoroughly steady and obliging; excellent references; passed Preliminary; age about 21; abstainer; comfortable home. Apply personally to J. R., 155 Praed Street, Paddington, W., after 6 P.M., Tuesday next.

AS Junior, one just out of his time preferred, who can be well recommended, and has been used to good country trade; must be quick and neat in work; Churchman; comfortable home; send carte, to be returned, and state usual particulars. Charles Jones, Market Place, Loughborough.

COMPETENT Junior Assistant, immediately, in an old-established Mixed Country business; well up in Dispensing, and capable of taking charge of Drug department; hours 7 to 7.30; no Sunday duty; half-day weekly. Carte, references, and full particulars to Sumner & Son, Coleshill, near Birmingham.

WANTED, for first week in September, an Assistant (indoors); must be a quick and accurate dispenser; one desiring a permanency, able to prescribe, and extract teeth preferred. Apply by letter stating age, experience, and salary required (enclose photo), to Rumsey, Chemist and Dentist, Lordship Lane, S.E.

WANTED, for a large Retail Drug business, a qualified Assistant, able to dispense, prescribe, and extract teeth; must be active and thoroughly obliging to customers; very liberal terms will be given to a good man. Apply by letter, enclosing references and photo, stating salary required, O. T., care of Raimes & Co., Wholesale Druggists, York.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

JUNIOR; aged 21; 8 years' experience. Apply, H., 19 Northgate, Sleaford.**LONDON**.—Junior; time for lectures; nominal salary. B., 39 Park Row, Nottingham.**LOCUM**; disengaged September 14; town, country. Keating, 458 Mile End Road, E.**ASSISTANT**, qualified; London preferred; aged 23; good references. Carman, 436 New Cross Road.**EVENING** employment, London or suburbs; good London experience. W. Lucraft, Broadclyst, Exeter.**CHEMIST** and Dentist or Dispenser; aged 27; outdoors. Maddock, 1 Parade, Lordship Lane, S.E.**ASSISTANT**, experienced; abstainer; 25. "Chemicus," Mrs. Williams, 21 St. Vincent Street, Southsea.**JUNIOR**; outdoors; London preferred; 3½ years' experience; aged 19½. H. F. G., 19 High Street, Bedford.**LOCUM-TENENS** during absence; good address; qualified. 6 The Exchange, Upper Tu'se Hill, S.W.**TEMPORARY**; outdoors; branch; Minor; experienced; tall; 31. F., 113 Riversdale Road, Highbury, N.**ASSISTANT** (26); can manage Branch; good London experience. Tully, Cocking, Chemist, Sittingbourne.**LOCUM-TENENS** during absence; long experience; qualified; country or seaside. X., 39 Powis Square, W.**MANAGER** or Senior; disengaged middle September; good references. "Qualified," Medical Hall, Llandudno.**ASSISTANT** or Manage Branch; aged 31; single; unqualified; indoors and permanency preferred. Lumbus, Aston, Nantwich.**LOCUM-TENENS** or permanent; highest testimonials; 23 years' experience. L., 17 St. Peter's Road, Handsworth, Birmingham.**ASSISTANT**, aged 39; height 5 ft. 8 in.; disengaged; Minor qualification; unmarried. "Chemist," 266 Albany Road, Camberwell.**TEMPORARY**; aged 30; disengaged about Sept. 9; good and varied experiences. "Imrie," Smith, Chemist, Broad Street, Birmingham.**LOCUM-TENENS** (registered); 35 years' experience; disengaged September 11th. Bellars, 41 Hanover Buildings, Tooley Street, S.E.**EVENING** work wanted in London after October 1; aged 24; unqualified; N.W. district preferred. Reakes, Littlebourne, Sandwich.**SENIOR** or Branch Manager; excellent testimonials and references; 20 years' experience; disengaged. Orton, Mr. Carter, Laura Place, Southampton.**AS** Improver (21); 4½ years' experience; passed Preliminary; abstainer; Eastern counties preferred. "Chemicus," 22 Thorpe Road, Norwich.**DISPENSER**, Surgeon, Hospital, Dispensary; experienced, qualified, reliable; whole or part time; terms moderate. Hunt, Chemist, The Plain, Waudsworth.**AS** Manager; upwards of 20 years' experience; good prescriber, &c., chemist, and surgeon-dentist (not mechanical); reliable. W., 217 Bethnal Green Road.**BRANCH** Manager, Dispenser; good references; town and country experience; qualified; disengaged; aged 27. M. G., 12 Rutland Street, Brompton Road.**AS** Traveller, or would accept foreign engagement; 18 years' experience; height 5 feet 11 inches. "Saccharin," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.**MR. S. 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Invaluable for Destroying Insects of all kinds on Plants and Fruit Trees, and Fungus and Moss in Greenhouses or Frames.

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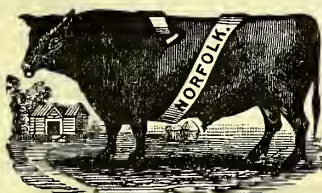
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"Sir,—I have tried the 'OSSOLINE' with excellent effect, and I think it the best remedy for Curbs, Splints, and other bony excrescences I have used.

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"T. C. P. CALLEY, Captain, 1st Life Guards."

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"Dear Sirs,—I have much pleasure in bearing testimony to the efficacy of your 'OSSOLINE.' I have used it on Curbs, Splints, and other kinds of bony enlargements, with the greatest success, and have no hesitation in strongly recommending it.—Yours faithfully,

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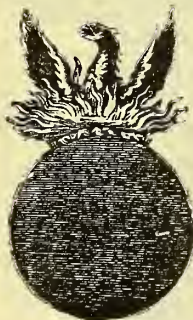
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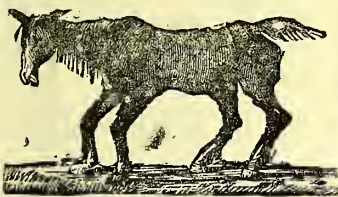
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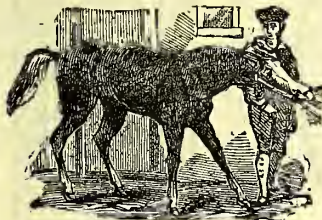
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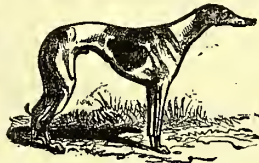
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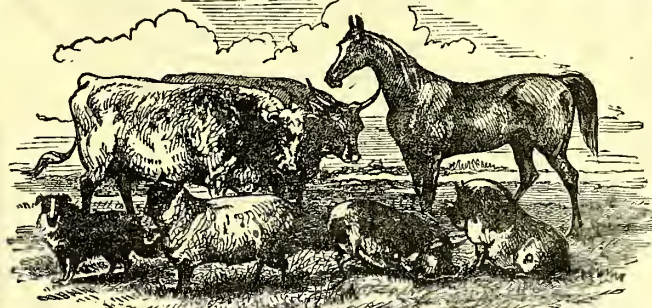
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	25 PILLS.	100 PILLS.		25 PILLS.	100 PILLS.
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" $\frac{1}{8}$ gr.	6/	20/	" $\frac{1}{4}$ gr.	5/	16/
" $\frac{1}{4}$ gr.	7/	24/	" $\frac{1}{2}$ gr.	5/6	18/
" $\frac{1}{2}$ gr.	11/	40/	" 1 gr.	7/6	26/
Compound $\frac{1}{4}$ gr.	7/	24/	" 2 gr.	9/6	34/
" and Strychnine..... $\frac{1}{4}$ gr.	7/	24/	" 3 gr.	11/6	42/
" Strychnine and Belladonna..... $\frac{1}{4}$ gr.	7/	24/	" 4 gr.	11/6	42/
" or Aperient, No. 1 (Clark)..... $\frac{1}{4}$ gr.	9/	32/	" 5 gr.	11/6	42/
" No. 2, No. 3, No. 4..... $\frac{1}{4}$ gr.	9/	32/	" Sulphate $\frac{1}{4}$ gr.	5/	16/
Morphine Muriate $\frac{1}{4}$ gr.	7/	24/	" $\frac{1}{2}$ gr.	5/	16/
Narcotic Extracts (Brown-Sequard)..... $\frac{1}{4}$ gr.	9/	32/	" 1 gr.	5/	16/
	15/	56/	" 2 gr.	8/	28/
			" 3 gr.	8/	28/
			" 4 gr.	10/	36/
			" 5 gr.	12/	44/

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Lozenges
Elixir
Tea

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PEPSIN GLYCER. ACID.—A strong solution of Pepsine, of a pale straw colour, feebly acid, and free from any offensive odour.

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INFANTS' FOOD, MALTED. EXTRACT OF MALT IN VACUO.

LIQUID BUTTER COLOURING.

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The Launceston Pharmaceutical Association.

South African Pharmaceutical Association.

For Australasian subscribers the subsidiary journal, THE CHEMIST AND DRUGGIST OF AUSTRALASIA, is included.

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ADVERTISEMENTS of situations vacant and wanted, businesses for disposal, &c., will be received by us up till the first post on Friday morning.

MR. HARRY V. DAKERS, our agent for the United States, has removed his office from Liberty Street to 24 Union Square, New York.

SUBSCRIBERS' ADDRESSES.—In order to ensure uninterrupted delivery of THE CHEMIST AND DRUGGIST to subscribers who may be changing their address, notice of such change should be received by the Publisher not later than Monday of the week in which the journal is to be sent to the new address.

THE PARIS EXHIBITION.—Our office in the Paris Exhibition is No. 9, the British Section of the Liberal Arts Gallery, where subscriptions can be paid or single copies purchased by persons connected with the drug trade. Our representative there, Mr. Lord, speaks French fluently, and will be pleased to render any assistance in his power to readers of THE CHEMIST AND DRUGGIST.

General and Provincial News.

CHARGE OF MANSLAUGHTER AGAINST A CHEMIST.—Charles Birch, chemist, Perth, Western Australia, who was committed on a charge of manslaughter for having supplied a woman with nux vomica in mistake for compound liquorice-powder, has been tried and acquitted.

CARBOLIC-ACID POISONING.—John William Fry, of Tunbridge Wells, who had formerly been in the army, and who had had two sunstrokes, died from carbolic acid self-administered on August 22. He was the worse for liquor when he took the poison. It came out that he had attempted suicide by cutting his throat on August 22, 1885, four years previously to the day of his death.

FATAL MISTAKES seem to have been rather frequent of late. We report the following cases in this issue:—A Liverpool sailor took Battle's killer in mistake for a seidlitz powder; a grocer at Manchester supplied cream of tartar in mistake for arrowroot, and a baby died from taking it; a man at Barnet died through drinking some cuprolene weed destroyer, thinking it was beer; and a man at Tunbridge Wells drank the ever-handy carbolic acid, probably in mistake for some safer beverage.

CORRECTION.—Mr. F. A. Dobson, who was one of the chemists fined at Birkenhead for selling methylated spirit without a licence (as reported on page 235 of THE CHEMIST AND DRUGGIST, August 17, 1889), states that he purchased the business in June, 1888, not in June, 1881, as stated in our report, and that the Excise purchase was made on May 21, 1889, so that he had not had the business a year. Mr. Dobson's defence was that he was waiting for notice of the expiry of the licence.

WINE LICENCES.—An "off" licence has been granted to Mr. Ernest Haworth Earle, chemist, 22 Market Place, Hull.—Mr. R. T. Brammall, chemist, 5 Lancashire Bridge, Stockport, having made application for such a licence, his application was opposed at the Stockport Brewster Sessions by Mr. R. Coppock on behalf of the Stockport Licensed Victuallers' Association. Mr. Brown, who appeared for the applicant, pointed out that, according to the Act of 1869, the application could only be refused on the grounds that the applicant had failed to produce satisfactory evidence of good character, or that the house or shop was of a disorderly character, or frequented by persons of bad character, or that the applicant had forfeited a previous licence, or that the applicant was not duly qualified as by law required. Mr. Coppock admitted that this was the law. It was a great mistake, he thought, and a great misfortune that those licences could be obtained so easily. However, they could not help it as the law was at present constituted. The magistrates' clerk advised the justices that they would have to grant the application.—The Hastings magistrates have granted licences to Mr. E. H. Hasselby, chemist, Eversfield Place; Mr. C. A. Tharle, chemist, Robertson Street; and to Mr. William E. Jameson, chemist, Harold Place and Grand Parade. Mr. Hasselby's application was supported by a memorial influentially signed by medical men. All these applications and a number of others were opposed by Mr. Chapman, barrister, on behalf of the Temperance Union. In reply to a magistrate Mr. Hasselby said he would be willing to agree to a condition that he should sell medicated wines only, but the clerk advised the bench that they had no power to impose conditions, or to enforce them if they imposed them.—A licence was granted at the Brewster Sessions on Tuesday to Mr. H. E. Cullwick, 14 Snow Hill, Wolverhampton.—At the annual licensing sessions at Leamington, on Monday, Mr. Overell, solicitor, applied for a licence on behalf of Mr. Holloway, chemist, 40 Bath Street. He explained that his client did not intend to sell ordinary wines, but those that went under the denomination of beef wine and coca wine, for the sale of which the Inland Revenue considered a licence was necessary. The Mayor said it was the first application of the kind that had come before the borough bench, who would have granted the request if the clerk had not pointed out an informality in the notice. Mr. Overell said he was not responsible for the notice, and his client would renew the application at the adjourned licensing session.

Metropolitan Reports.

THE FRUITS OF DOG-POISONING.—It is reported that Mr. Gaubert, a chemist, had his thumb fearfully lacerated by a rabid dog in Sudbury last week while attempting to poison the animal. He went to Paris on Saturday, in order to be treated by Pasteur, and was accompanied by the three youths who were bitten by the same dog.

ROBBERING A CHEMIST.—Joseph Henry Banks, who, as reported last week, robbed his employer, Mr. S. G. Jones, chemist, of Kingsland Road, of 44*l*, was brought up on remand before Mr. Bros at the Dalston Police Court on August 26. The police officer said he had been unable to find out that anyone had participated in the theft. Prisoner said he was very sorry. He yielded to sudden temptation. The Magistrate: And only gave yourself up to the police when all the money had gone. I hope this will be a warning to you. Two months' hard labour.

ALLEGED BURGLARS IN A SPONGE WAREHOUSE.—Two men, named Clarke and Burt, were charged at the Clerkenwell Police Court on Monday with having been engaged in a burglary on the premises of Messrs. Harris & Co, sponge importers and chemical manufacturers, 65 Bath Street, St. Luke's, on Saturday. A constable noticed that the warehouse door was loose, and looking through a glass he saw the prisoners crouching on the floor. They afterwards went upstairs. Getting assistance, he entered and pursued them. The constables caught them in a room on the second floor. The prisoners, after a struggle, got away, and jumped through the window, a distance of 40 feet, to the yard. They were afterwards taken into custody by the other officers. Clarke had an unloaded revolver in his possession. The prisoners were remanded.

CRICKET.—S. Maw, Son & Thompson's C.C. v. The Longford, Rylands & Sons (Limited). Played at Priory Farm, Honor Oak, on Saturday last. Score:—

<i>Rylands & Sons (Limited).</i>		<i>S. M. S. & T.</i>	
Dyer, b Robson	0	Frampton, b Armstrong ..	10
Priestley, b Robson ..	0	Lawrence, b Fairall ..	9
Moth, b Robson	8	Robson, b Armstrong ..	7
Beale, b Robson	0	Buxton, not out	20
Fairall, b Robson	4	Masters, c Fairall, b Moth	0
Barratt, b Robson	4	Moring, not out	5
Knight, c Robson, b Masters	0	Extras	3
Armstrong, b Robson ..	10		
Spindler, b Buxton ..	1	Total	54
Rowlands, not out ..	4	Hasthorpe, E. Burningham, Hard-	
Porter, b Robson	0	wick, Williams, and Denman did	
Extras	3	not bat.	
Total	34		

IN MISTAKE FOR BEER.—A man, named Osborn, in the employment of Mr. Higgs at Willenhall Park, East Barnet, died on Saturday last from an unfortunate mistake. In a shed on the premises had been stored a quantity of hay-makers' beer in 9-gallon casks, but these casks being empty had been removed. There remained, however, one cask of similar size and make which contained a poisonous liquid used for the purpose of destroying weeds. It was distinctly labelled "Poison—Cuprolene Weed Destroyer." Osborn had been sent to this shed to fetch a tool, and the key of the shed was lent to him. Seeing the cask, and supposing it to contain ale, he proceeded to help himself. As he was taking the liquor surreptitiously, and his principal was awaiting his return, he doubtless drank hurriedly and deeply, and as the contents of the cask were exactly similar in appearance to light ale, he did not discover the error until it was too late. A few minutes later he was seen to be vomiting freely, and on being questioned he said he had taken poison in mistake for ale. He died shortly afterwards in great agony.

SUICIDE OF A CHEMIST'S ASSISTANT.—An inquest was held at Battersea on Tuesday, before Mr. A. Braxton Hicks, respecting the death of William Lowe (29), chemist's assistant. From the evidence it appeared that the deceased was engaged by Mr. Moyse, chemist, as manager of his branch shop at

50 Plough Road, Battersea. Deceased had lost money in business, and this preyed upon his mind. On the morning of August 26 he appeared as usual. At 12 A.M. he retired to his bedroom, and poisoned himself by taking prussic acid. The jury returned a verdict of "Suicide whilst temporarily insane." During the hearing of the case it transpired that the deceased was not a qualified assistant. Mr. Moyse was called, and stated that he was not aware that that was the case. He asked deceased when he engaged him if he was qualified, and he replied in the affirmative. The coroner intimated that he should write to the Pharmaceutical Society, requesting that body to make it an offence against its rules to engage an unqualified assistant to manage a shop. The jury, upon hearing this, added a rider to their verdict that Mr. Moyse was to blame in not taking the necessary steps to ascertain that the deceased was properly qualified.

A DYING CITY DRUG BUSINESS.—The executors of the late Mr. Crispe have sold the lease of the premises at Cheap-side to Mr. D. H. Nicholson, draper, who occupies the premises adjoining, and who intends to convert the two shops into one. A representative of THE CHEMIST AND DRUGGIST called in at Butler & Crispe's in regard to the matter, and in reply to inquiries he was informed that by next week the drug business so long carried on in Butler & Crispe's names would cease to exist, as it is considered impracticable to carry it on. We may mention that the business was left to Mr. James Crispe's son, Mr. James Herbert Crispe, who is not a chemist and druggist, subject to his paying an annuity of 300*l*. to Mrs. James Crispe; and, although the Pharmacy Act does not prevent him carrying it on, it is evident that he could only do so at a disadvantage. Our representative asked if the business was not to be transferred to anyone, and the reply was that several were in treaty for it. "As a stock or as a business?" "As a stock," was the reply. "Then there will be a Butler & Crispe no more. Why this is one of the oldest drug businesses in the City, is it not?" "Yes. You see by the shop-front what it is." "True, it is an old-fashioned front, and will not suit a draper." With that our representative left. We understand that the business dates back to nearly the beginning of this century, so that it at one time shared the flow of fortune which up to a quarter of a century ago was confined to the limits of the City, owing to many of the City merchants residing therein. The efflux to the suburbs must, therefore, have made a great difference in City trade, and that no doubt is one of the factors which have brought an end to the history of the firm "Butler & Crispe."

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor will much oblige.

BIRMINGHAM.

FIRE—A serious fire occurred at the shop of Mr. Williams, chemist, 72 Camp Hill, on Saturday last. The fire was extinguished in rather less than an hour, but much damage was done in the basement and on the ground-floor. No explanation of the origin of the fire can be given. The proprietor was said to be away for his holidays, and the shop was in charge of an assistant.

INFANTS' FOOD.—In an article in a local medical paper Dr. Carter, during the course of some sensible remarks on infants' food, recommends the following, which is known and described as Dr. Meig's formula:—

Cream (30-35 per cent. fat) ..	2 parts
Milk	1 "
Lime-water	2 "
Sugar-of-milk water	3 "

This, he says, represents very closely the composition of human milk.

CHEMISTS AND VACCINATION.—As we announced last week, Mr. Mantle, junr., chemist, of this city, was summoned before the magistrates for refusing to have his child

vaccinated, and as the result of declining to obey an order for vaccination had his goods distrained upon. On Tuesday night an indignation meeting was held in the Bristol Street Board Schools to protest against the Birmingham guardians taking the harsh step of levying the distraint. The gathering was well attended, and there were present a few pharmacists. In seconding the resolution urging that it was the duty of those who dissented on conscientious grounds from the doctrine of vaccination to save their children from this foul and unnatural operation, Mr. Trowbridge, a chemist, said it seemed to him that the resolution dealt more especially with the religious aspect of the case. He would point out that even if they regarded vaccination as harmless to their children as baptism, if they sanctioned its operation they were really hiding the real cause of disease, and shutting their eyes to the cause of small-pox. Small-pox was God's judgment on the people for breaking the laws of health. When the Queen elected to be vaccinated some years ago she did not go to the public vaccination station as the children of the poor had to. The vaccine in this country was not pure enough for the Queen; it had to be got from Belgium; and he maintained that what was not good enough for the Queen was not good enough for her subjects. (Applause.) A resolution was afterwards agreed to thanking Mr. Mantle for the loyal and courageous stand he had made in the defence of the liberty of the people.

BLANDFORD.

AN APPRENTICESHIP CASE.—An interesting case was heard at the Blandford County Court before his Honour Judge Mackonochie and a jury last week. Mr. Reginald Gill, chemist, Blandford, sued Christopher Hillyard, commercial traveller, for 18*l.* for board and lodgings and tuition supplied to defendant's son, preparatory to his being apprenticed to plaintiff. Mr. W. E. Brennand for plaintiff, and Mr. Hutton for defendant. The plaintiff stated that in the early part of 1888 he was looking out for an apprentice and heard defendant had a son whom he wished to apprentice. He saw defendant at Blandford about the end of June. It was arranged that the son should come a month on trial and then be apprenticed if suitable. He came at the end of July, and he wrote to defendant in September saying that his son had given satisfaction, and was attentive to his studies. With regard to the indentures, he should prefer them to be signed at once. In consequence of the defendant's reply the indentures were postponed, and his son went up for examination and failed. Witness had interviews with defendant, and it was agreed that 36*l.* per annum was to be paid for the son's board and lodging and tuition until he was apprenticed. Mr. R. H. Groves was present at one of the interviews, when it was arranged that the boy should again go up for examination in January, 1889, without fail. The fees were not paid in time, however. Witness then wrote and asked for 12*l.* by way of security for board and lodging and tuition, and also sent an agreement, but this defendant did not sign, alleging it was one-sided. Not receiving any payment from defendant he sent the boy home on March 2 last. During the time the boy was with witness he was instructed in the business, and the damages sustained amounted to the sum claimed. Mr. Groves, on behalf of plaintiff, stated that at the interview at which he was present the question as to the amount for board and lodging was the principal conversation. The first year's service of an apprentice was absolutely worthless, in fact he would require 100*l.* for one year. For the defendant Mr. Hutton said the claim was excessive, and was set off by the services of defendant's son, which were very valuable to plaintiff. The negotiations with reference to the apprenticeship fell through owing to the refusal of plaintiff to sign a fair agreement. Defendant, being called, said he would not have objected to pay for board and lodging if it would have come out of the premium. He complained the plaintiff did not allow his son sufficient time for study. The son, on being called, admitted the plaintiff had offered him extra time for study when business was slack. The jury returned a verdict for the plaintiff, damages 10*l.*

LIVERPOOL.

IN MISTAKE FOR A SEIDLITZ.—A sailor named Campbell (45), living at 23 Frederick Street, died last week from the

effects of Battle's vermin-killer, which he took, he said, in mistake for a powder to sober himself. He had been drinking heavily, and had to join his ship the morning when he took the poison.

SELLING POISONS BY AUCTION.—The attention of the Council of the Pharmaceutical Society should be directed to this source of danger to the public and breach of the law. Last week, at the sale of the effects of a veterinary surgeon, corrosive sublimate, sulphate of zinc, laudanum, &c., were sold in "a lot of drugs," and an iron drum half full of carbolic acid was offered as "half a can of oil." Danger from this latter was probably averted by an old gentleman, who wished to know the kind of oil, and thrust his walking-stick into it; drawing it out and placing it in close proximity to his nose, he pronounced it to be tar.

THE END OF THE MAYBRICK CASE.—Although not more than 2 per cent. of the medical men and chemists in Liverpool, and less than 5 per cent. of the public, thought Mrs. Maybrick innocent, a very general hope prevailed that some way would be found by which the carrying out of the extreme penalty of the law might be avoided without doing violence to justice. Investigation proves that the statement made by the prisoner during the trial was untrue, as arsenic is found to be very sparingly soluble in Valentine's meat juice, and if introduced in powder would have remained almost entirely undissolved. There remain some dissatisfied people on both sides, but the decision of the Home Secretary to commute the sentence to penal servitude for life has given general satisfaction.

CHEMISTS, BEWARE!—The recent successful prosecution of a number of chemists in Birkenhead for the sale of methylated spirit without a licence is calculated to stimulate the Excise authorities to further action. This hint is based on the safe rule of "never prophesying unless you know." Inattentive chemists should, therefore, "set their house in order," and bring themselves in compliance with the statutes which affect the articles they sell. Notwithstanding repeated authoritative statements to the contrary, an opinion largely obtains in the trade that the patent-medicine stamp on a bottle of medicated wine legalises its sale without a wine licence. That it does nothing of the kind cannot be too strongly emphasised, and as some of the French goods of this class bear labels, or are accompanied by circulars recommending them as a beverage, an attack on the sale of these may be expected.

MANCHESTER.

CREAM OF TARTAR FOR ARROWROOT.—A child named Ernest Lee, 3½ months old, son of a milk dealer living in Byrom Street, died on Saturday as the result of the administration of a dose of cream of tartar in mistake for arrowroot. On the previous Monday a woman lodging in the house went to the shop of Messrs. Melia & Co., grocers, in Deansgate, and asked for arrowroot. She was served from a tin labelled in large letters "Genuine St. Vincent Arrowroot," but it was afterwards discovered that the words "Cream of Tartar, 1*s.* 8*d.* a pound" were written across the label in ink. The woman gave the child a portion of the article after mixing it with water. She noticed that the stuff did not seem to mix properly, but it was not until the deceased became ill that the mistake was discovered. Dr. Mann was then called in, but he was unable to save the child's life. In his opinion the cream of tartar was the cause of death. At the inquest this evidence having been given, Henry Cavanagh, the assistant who supplied the cream of tartar, said he had never before sold any cream of tartar. The manager, George Worsley, told him that he had that morning filled a tin with cream of tartar, and had altered the label accordingly. Witness did not notice the writing when he served the woman. George Worsley, after being cautioned, said that the cream of tartar was put into the arrowroot tin to preserve it. He was not aware that cream of tartar was poison. He admitted having altered the label, and said that at the time he did so he called the attention of the assistants, including Cavanagh, to the change. The coroner asked the jury whether they thought the label had been sufficiently altered to prevent the possibility of mistake, and said that if they thought there was any gross or criminal negligence on the part of Worsley they should commit him for trial on a

charge of manslaughter. The jury found that the child died from diarrhoea, the result of the administration of cream of tartar in mistake for arrowroot. They considered that Mr. Melia should be censured for employing a manager so young as Worsley (he being only twenty years old), and that Worsley should be censured for his negligence. The coroner said that on the evidence the jury would have been quite justified had they sent Worsley to take his trial on a charge of manslaughter.

THE GLASS-BOTTLE TRADE.—The glass-bottle makers of the country held a great demonstration on Saturday in the Belle Vue Gardens at Manchester. The gathering numbered about 2,000. A meeting was held in the course of the afternoon in the large ball-room in the gardens. Mr. A. Greenwood, of the Yorkshire district, who presided, spoke of the proposal to form a glass-bottle syndicate. He maintained that there was no necessity for doing this; and said that if the union resolved upon introducing the new machine for making bottles it would be a bad look-out for the workmen. He urged the bottle-makers of the country to amalgamate, and protect themselves against the encroachments which, he said, were persistently being made upon their wages, owing to the "cutting" process among employers. After some other speaking, the following resolution was carried unanimously:—"That this assembly of glass-bottle makers of the United Kingdom of Great Britain and Ireland expresses its disapproval of the action of the glass-bottle manufacturers generally throughout the United Kingdom in not fixing minimum prices for bottles, and in underselling each other in order to get business, which results not only in loss of profits on their manufactures, but also in loss of wages to the workmen." A further resolution was also adopted expressing the opinion that it was desirable that the workmen in the trade should amalgamate, and form one organisation only, "in order to improve their present position."

NEWCASTLE-ON-TYNE.

PATENT-MEDICINE STAMPS.—Although the informer on tramp is not at the present moment disturbing them, Northern pharmacists have not forgotten him, and the committee appointed to deal with this matter will shortly issue a report setting forth their grievances.

ACCOMMODATION FOR VISITORS TO THE BRITISH ASSOCIATION.—The local committee are in great straits over providing for the influx of visitors which mid-September will bring them, but it is satisfactory to note that a large number of apartments has been obtained by the hon. local secretary of the Pharmaceutical Conference for those attending.

SEQUAH IN THE NORTH-EAST.—Surely this is so happy a hunting-ground that the wordy warrior will wish no better in which to wield his forceps in the extraction of teeth, or his oratorical power in the extraction of cash. The sale of his medicines has made both retail and wholesale trade stand aghast at its rapidity, and it has been by no means so evanescent as some had predicted. Getting into the hands of grocers, it was sold without a profit for a short time; but to his honour, be it said, prompt efforts were made by the great medicine-man to remedy this, and 1s. 10d. is now the settled price for the 2s. bottles. It is interesting to note that there is in the demands of human ills room for one other remedy, as his marvels cannot grapple with pneumonia, for one of his Indians has succumbed to this disease.

SHOP IMPROVEMENTS IN NEWCASTLE.—Never far behind in this respect, the "Canny Toon" has been pushing forward rapidly lately, and chemists have been among the foremost. Messrs. Watson, Ritson, and Hall have modernised their respective shops very tastefully, while more lately the external appearance of the establishment of Messrs. Proctor, Son & Clague has undergone renovation. No attempts have, however, been made to rival the classical appearance of Messrs. Brady & Martin's pharmacy. Extremes meet in this city, and some of the best samples of the antique in apothecarial style may be seen, and the unique look of the late Mr. Crozier's shop, which never sees daylight, is still kept up. An ancient tradition has it that the shutters could not be induced to come down, and so only a doorway admits light and customers.

PLYMOUTH.

BOTANY CLASSES.—The results of the examination in botany (Plymouth Navigation School) held by the Science and Art Department, South Kensington, in May last, have just been issued. Of those successful the following are connected with the drug trade. Elementary.—First Class: Francis J. Allen, Thomas N. Andrews, Edward G. Turney, Frederick E. Turney, and Ernest T. Wood. Second Class: Charles Skeat and John W. Swainsey.

SHEFFIELD.

SHEFFIELD PHARMACEUTICAL AND CHEMICAL SOCIETY.—The results of the examinations at the School of Pharmacy are as follows:—President's Prize (for all subjects): (1) A. S. Smith, (2) H. Twelves. Materia Medica: (1) A. S. Smith, (2) H. Twelves. Botany: (1) C. D. Moffat, (2) H. Twelves. Theoretical Chemistry: (1) H. Twelves, (2) C. D. Moffat. Practical Chemistry: A. Barrett. Mr. Jno. Humphrey has been appointed lecturer in botany in place of Mr. Grier-son, F.L.S., who has resigned, after conducting the class since the formation of the school.

IRELAND.

MR. ATKINSON, L.P.S.I., Harcourt Road, Dublin, has just completed some very neat additions and alterations to his extensive premises.

An enterprising Dublin "mineral man" is doing a roaring trade by selling wholesale quantities of aerated waters at 7d. per dozen.

The results just issued of the Cork School of Science show that the principal prizes in botany have this year been awarded exclusively to female students.

WHOLESALE druggists are invited to forward tenders for a year's supply of drugs and medicines to the Thurles Union and a number of adjacent dispensaries.

TENDERS for a twelve months' supply of drugs, medicines, and surgical appliances are required for the Omagh Union and nine dispensaries throughout the district. Applications are to be received not later than September 13.

THE BOARD OF GUARDIANS of the Dungannon Union invite tenders for a year's supply of medicines and drugs for the workhouse and five dispensaries attached. The selection of the contractor will be made on September 5.

SIR CHARLES CAMERON, Dublin, analyst, reports that the present city death-rate from contagious diseases is 130 per cent. over last year's return, the greater part of the mortality being due to diarrhoea, which is now very prevalent throughout the city. Handbills on the subject, containing precautionary remedies, are freely circulated by all public bodies.

THE BELFAST HARBOUR COMMISSIONERS have proposed a reduction of 20 per cent. on the rates levied on goods, the change to come into effect on and after January next. The matter has been placed in the hands of a special committee, and the result will be made known in the course of a few days.

AT the Belfast Police Court a few days ago an elderly man named Killen was charged with having swallowed a quantity of carbolic acid with the intention of taking away his life. The accused having urged extenuating circumstances for his conduct, he was cautioned against a future use of the poison and discharged.

INFANT MORTALITY.—The Registrar-General of Ireland in a recent report referred to the extraordinary mortality among children in Dublin, the returns showing a great increase over former statistics, the cause being stated to lie at the doors of careless and improvident parents, who prefer to squander their earnings and quack their offspring with pills and miscellaneous drugs rather than consult the medical faculty.

A THOROUGHLY-SEASONED old toper requested a few days ago a bottle of ginger ale, "to take the thirst off," as he expressed it. In the course of a big drink he remarked: "That's the best ginger ale I've had for weeks; let's have another." The assistant, between his mirth, gurgled out, "Beg pardon, sir; I find I have given you Worcester sauce in mistake; I have the ginger ale at my hand."

THE CORK DISPENSARY COMMITTEE met last week for the purpose of appointing an apothecary in the room of Mr. McSweeney, lately resigned. Two candidates presented themselves for the post, Messrs. Scott and Hanrahan, and, on a poll being taken, the latter was appointed by a majority of twenty-three guardians. A vote of thanks was subsequently passed to Messrs. Harrington & Scannell, pharmaceutical chemists, for discharging the duties *pro tem.*, and the defeated candidate was, after a heated discussion, specially complimented for his zeal and attention to the compounding department of the dispensary.

SCOTLAND.

ABERDEEN.

MR. HENRY MILNE has opened a shop in High Street, Old Aberdeen. For the last generation this academic town has been the sole hunting-ground of the late postmaster.

KNOWING.—Some doctors in the town have become so enamoured of the cutting craze that it is seriously interfering with their prescribing principles. Here is a sample:—

Ac. nit. hyd. dil...	..	..	..	3ij.
Sp. chlorof.	..	..	..	3iss.
Syr. aurant.	..	..	..	3iv.
Inf. gent. co. conc. ad	..	..	..	3ij.

M.

Ft. mist. Sig. 3j. in a winegl. of water before meals.

This was presented for dispensing after cutting-shop hours, or it would have probably gone to one of them.

DUNDEE.

THE CHEMISTS' ASSISTANTS' CRICKET TEAM met the Airlie C.C. at Stobsmuir on Wednesday afternoon, and after some good play came off victorious, having 48 runs to the Airlie's 44.

GLASGOW.

THE THEFT OF PLATINUM.—John McDonald, watchmaker, who, as already reported, was strongly urged by the judge to disclose the whereabouts of the missing part of the stolen platinum, and whose sentence was delayed to give him an opportunity of doing so, has "personally conducted" the police to a field in the suburbs, where the most of the lost metal was found buried. Sentence is not yet passed.

THE PUREYETAS COMPANY.—The company formed in Glasgow to manufacture a new disinfectant under the somewhat uncouth name of "Pureyetas," for which an unexampled superiority is claimed, entertained a select party to dinner in the Royal Hotel on August 23. Mr. Annat, the managing director, proposed as the toast of the evening, "The Health of the People," and naturally took the opportunity of dilating upon the discovery which the company is to work. Though "Pureyetas" had only recently been discovered, the ancient Egyptians, he felt sure, were aware of carbon (which was the most active ingredient in "Pureyetas"), for their mummies during the thousands of years that had elapsed since they were first laid on the shelves of the Egyptian catacombs owed much of their freshness to carbon.

THE IRREPRESSIBLE INTERVIEWER.—The indefatigable newspaper man called at Messrs. Frazer & Green's one day last week, when the Maybrick case was all the vogue, and, finding Mr. Sam Frazer in (who, by the way, was described in the report as Mr. Daniel Frazer), made him responsible for such inaccuracies as that arsenic was much used as a cosmetic in the West of Scotland, that it would be dangerous for habitual arsenicophagists to suddenly discontinue taking it, and that liq. arsenicalis (Fowler's solution) contains $4\frac{1}{2}$ per cent. of arsenious acid. Mr. Sam Frazer wrote an explanatory note to next day's paper, but, as the interviewer had the proverbial twenty-four hours' start, it is likely his version had the best of it.

AN IRUPTION.—Last Tuesday week two men alighted from a cab at Mr. Campbell's shop, King Street, Pollokshaws, and after entering the shop became very disorderly. On being remonstrated with by the shopman they assaulted him, and then smashed a number of medicine bottles and other articles, and immediately after drove off hastily in the cab before the police could be summoned.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

FOR THIS YEAR ONLY, and as an exception to a recent ministerial circular, the Minister of War has ordered that doctors of medicine and pharmacists of the first class who have served one year as volunteers shall be allowed to serve their second term in military hospitals. Next year the new military law is to be enforced without fear or favour—probably.

THE 2,000*l.* PRIZE STILL OPEN TO CHEMISTS.—The Congress on Alcoholism and kindred topics, which not long since met here, after examining various processes proposed, has declared that "a practical method for detecting in commercial spirits and alcoholic beverages the presence and percentage of the higher alcohols still remains to be found." So chemists may yet try to win the 50,000*f.* prize offered by the French Government.

SIR WILLIAM THOMSON, who is a corresponding member of the Academy of Sciences, was present at the sitting of August 26, and read two memoirs. One was "On the molecular statics in the artificial macle of Iceland spar produced by Baunhofer by means of a knife," and the other "On the equilibrium of atoms and the elasticity of solids, according to Boscowich's theory of matter." The titles are here, of course, re-translated into English, as the papers were presented in the French language. Sir William read his memoirs himself in a very clear manner, and wore on the occasion the red rosette of an officer of the Legion of Honour.

THE MORPHINE AND COCAINE HABITS.—At the Congress of Legal Medicine, recently held, the abuse of morphine came up for consideration. It seems nowadays morphio-maniacs seldom apply to pharmacists for a supply of the drug. The law is so strict, and has of late been so rigidly enforced by heavy fines, that pharmacists take unusual precautions, and maniacs have been looking elsewhere for their supply of morphine. They have found that it is easier to get one ounce of morphine from a wholesaler or broker than a few grains from a pharmacist. It is besides considerably cheaper and easier to conceal. Hence the retail morphine trade has greatly decreased, while the wholesale,—uncontrolled by the physician—has dangerously increased. To counteract this state of affairs, the Congress of Legal Medicine passed resolutions, and asked that they be sanctioned by legislative authority, to the effect that (1) "Wholesale druggists and chemical manufacturers shall sell morphine and cocaine to pharmacists only, and deliver the poison at the buyer's house. (2) Pharmacists shall dispense only once, unless the contrary be mentioned by the prescriber, a prescription containing either morphine or cocaine."

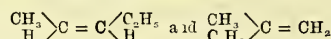
THE EIFFEL TOWER STRUCK BY LIGHTNING.—A few days since the tall tower was, during a storm, hit by a thunderbolt, and many sensational stories have been circulated in reference to the occurrence. Some reports spoke of the lightning-rod having been melted into a ball, others of a shower of molten iron dropping on the bystanders, and, again, others had wonderful tales of sheet lightning and electric shocks. In consequence the shares at the Bourse went down 60*f.* in one day, a result probably showing the "true inwardness" of the *canards*. At the last sitting of the Academy of Sciences, M. Mascart gave the true account of the incident, for accident there was none. The tower top is protected by three lightning-rods, one vertical on the highest point, and two oblique ones a little below, on the belvedere sides. Some time since, it seems, the end of the topmost rod was noticed to be slightly shaky, and as the piece weighs several kilogrammes, it was thought prudent to take it down for repairs, while the iron nut serving to hold it, screwed fast to the lower half, was left in place. It is this nut which was mistaken for a ball of melted iron. On examining it afterwards it was found indeed that some particles had been struck off by the fluid, as when steel is struck with a flint, and to a like phenomenon the flying sparks may be attributed, but no appreciable portion of the metal was melted off. While the storm was at its highest aigrettes of light kept issuing from the three rods, and the keepers were surrounded with a luminous haze. They were

startled by the loud report when lightning struck the rod, but neither then nor at any time did they experience any shock. No harm befell anyone on the tower at the time, and none can happen from thunderstorms, the conductivity being practically perfect.

THE UNIFICATION OF NOMENCLATURE IN ORGANIC CHEMISTRY.—The following is the text of the resolutions adopted at the International Chemical Congress recently held in Paris, and mentioned in *THE CHEMIST AND DRUGGIST* of August 10.

Nomenclature of the non-saturated derivatives of the fatty series.—"The letters *a* and *b* shall designate the two atoms of carbon bound together by multiple links, in the case of bi-substituted derivatives; in the case of tri-substituted derivatives the designation may be omitted, provided the two radicals united to the same atom of carbon be named first."

For instance, the compounds—



shall henceforth be known as (1) *a*-methyl-*b*-ethyl-ethylen, (2) *a*-methyl-ethyl-ethylen.

The same rule shall apply to bi-substituted ureas.

Nomenclature of aldehyds.—"Aldehyds shall henceforth bear the name of the corresponding alcohols, instead of the acids." Hence we shall have methylic, ethylic, and benzylic aldehyds, instead of formic, acetic, and benzoic aldehyds. A good reason for the change is that the word aldehyd is only an abbreviation for de-hydrogenated alcohol.

Nomenclature of acetones.—"In the designation of acetones, for the word carbonyl, which is liable to misunderstanding, the term *cetone* shall be substituted, as it has no special meaning as yet, and corresponds to the word *ketone* used in German literature."

Consequently ordinary acetone, $\text{CH}_3\text{—CO—CH}_3$, will be called dimethylcetone, instead of dimethylcarbonyl. In the same way the compound $\text{CH}_3\text{—CH}_2\text{—CO—CH}_2\text{—CH}_3$, hitherto indiscriminately called dimethylacetone and diethylcarbonyl, will definitely be known as diethylcetone.

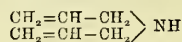
Designation of the group CN.—"The group CN shall keep the name of cyanogen when substituted to an atom of hydrogen." Hence, for instance, the compound $\text{C}_2\text{H}_5\text{—CN}$, known as ethyl cyanide or propionitrile indifferently, will henceforth bear the name of cyanethan.

Value of the termination ol.—"In the designation of hydrocarbons the termination *ol* shall be entirely discarded, and exclusively reserved for alcohols and phenols. The names of aromatic hydrocarbons shall always have the desinence *en*." [Note.—In the French text the desinence is spelled *ène*, which in Latin languages has for equivalent *ena* or *eno*, and in the Germanic *en*. The last form has in this article been preferred to *ene*, which in English, owing to the absence of accents, is liable to be mistaken for *ine*.]

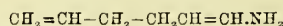
According to the foregoing rule *durel* and *naphthaline* will become *duren* and *naphthalen*, and so on with others.

Fixing the value of the prefixes bi and di.—"When designating bodies formed by a duplication of the radicals the prefix *bi* shall henceforth be employed, and *di* be kept for double substitutions; according to this convention some names already adopted are to be gradually transformed, and diphenyl, dipropagyl, &c, for instance, shall be known as biphenyl, bipropagyl, &c."

One example will suffice to illustrate this important resolution. Let us take the two following compounds:—(1)



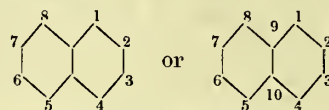
and (2)



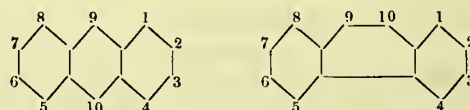
each containing allylic groups. The first, being an amine twice substituted by the allyl radical, will be called di-allylamine. The second, being an amine substituted by one group resulting from a duplication of the allyl radical, will be named bi-allylamine.

Nomenclature of complicated nuclei like naphthalen, anthracen, &c.; designation of the apices.—Complicated nuclei are, it is known, represented by regular geometric figures. When compounds derived therefrom are to be named, it is necessary to indicate on which apex the substitution of hydrogen by a radical has taken place.

Such points may be designated either by numbers or by Roman or Greek letters. The Congress has decided in favour of Arab numbers, and adopted the following order for the principal nuclei:—

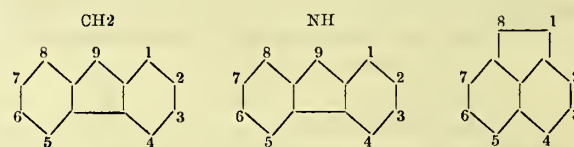


For naphthalen (or naphthaline).



Anthracen.

Phenanthren.



Fluoren.

Carbazol.

Acenaphthen.

The programme bore also other desiderata, such as a system of notation for nitro-compounds and for nuclei containing other atoms than carbon and hydrogen, but the questions were not considered mature enough for a final decision, and were consequently referred to some future international congress or commission. It was hoped also by pharmacists that chemists, leaving aside for a moment pure theory, might think of practical concerns, and take initial steps towards a simplification of nomenclature, so that currently used chemicals should have names not exceeding four or five syllables. But the programme was already so heavy that it became impossible to consider outside questions, and the much-desired improvement was left in abeyance. It is perhaps unjust to ask or expect too much of one congress. So let this be praised for the good work it has done. If the resolutions adopted be generally accepted, as it is hoped they will be, important progress will have been secured towards uniformity in organic nomenclature, and simplicity will afterwards be more easily obtainable.

RATHER (PICK-ME) UPPISH!

BAI Jove! we now shuddah at pick-me-ups strong
(Thanks to Fashion, who wules o'er our nation),
Not to bars, but to chemists, we amble along,
When we feel a wong "chippy" sensation.
Lime-juice sywup and pywetic saline we sip,
Wefusing all dwinks alcoholic;
And when, 'gainst some similah chappie we twip,
We wemark, with a kind of a fwolic—

"I say, chappie!
Have a pywetic saline along with me.
Won't yew? Won't yew?
Then take a lime-juice sywup along with me?
Don't dwink! Don't yew?
I'd like to stand a dose or two,
'Twill pull yew wound, indeed 'tis twue!
So split a 'sal' or sywup along with me.
Deah me! Won't yew?"

Now, say you've been "fwesh" ovah-night with a chum
(Who, p'waps, is a "Pelican" bwothah),
And when yew wake next afternoon, yew feel glum,
And beastly depvession you'd smothah;
To the neapest of chemists and dwuggists yew cwawl
To quaff the befaw-mentioned potion;
When, if fellow-chappies you meet there at all,
They'll say, just to pwece their devotion—

"I say, chappie," &c.

Ally Sloper.

THE PARIS EXHIBITION.

(SEVENTH NOTICE.)

MISCELLANEOUS APPARATUS.

CONTINUING our report of the exhibits in the Machinery Hall, we take, on the present occasion, a slight divergence from the group of apparatus to which reference has previously been made. The manufactures which we have now to refer to are of very varied character, and are the production of American, English, and French houses. Some are to be found in the Machinery Hall, and others in the American Court, as will hereafter be indicated. Before proceeding to this we may call attention to two exhibits which illustrate in a fairly good fashion

FRENCH SHOP-FITTINGS,

which will be found in one of the galleries of the Machinery Hall. The exhibits, each of which figures as an "Installation de Pharmacie," are side by side, and would look like one pharmacy were it not that the fittings of one (that made by VOILLEREAU) is cream-coloured, while the other (manufactured by BERTIN, TISSIER & CIE., 90 Rue de Rivoli, Paris) is in dark-coloured wood. The latter has somewhat rough-looking fixtures, because of their being made of unpolished wood, in the style which we are accustomed to associate here with cheap "Swiss-carved" brackets, but the effect is pleasing, nevertheless, and, as the architectural style is the French Renaissance, it would be a suitable innovation for small pharmacies in this country. In the majority of Parisian pharmacies this architectural style is as common as it is in the public buildings, and that is the reason, probably, why one is at first apt to think that Paris pharmacies are better fitted than London ones. We do not really think that such is the case, but we freely admit that some of the most elegant English pharmacies owe their beauty to their being in Renaissance style. We must blame Bertin, Tissier & Cie. for some of these reflections, which flit through the mind as one sits on the comfortable settee which they have placed in the gallery. On the top of this settee they have fixed three pretty models of pharmacies "fixed," as the Americans say, after different fashions. In their "installation" the window is high-class, that is, is sacred to specie-jars, just as ours are here. The counter has its complement of glass-cases, and the back of one end of it is fitted to serve as the dispensing-counter; there being a chemical balance and other things on it which would, if we did not know better, give us an idea that French dispensing is a more elegant thing than it is. In the centre of the counter is an inquiry-desk, which makes the counter more like a screen for an office rather than the intermedium between buyers and sellers which we, as members of the great nation of shopkeepers, put down as the use of a counter. The bottles and jars on the shelves are of different kinds, exhibited, in fact, to show styles more than anything else. None of them are particularly striking as novelties, and we got no fresh ideas from them. M. Voillereau's "installation" is most charming—the fittings cream-coloured, the jars blue and cream, the greater part of one wall filled in with a mirror beautifully draped with a plush curtain, and the counter crossing the floor of the pharmacy, not going lengthwise, as next door. Each of these produces its own effect, and the whole forms a lovely combination. Wondering if it will wear well, we turn our attention to another section of the Exhibition. This is that which illustrates the

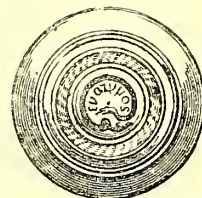
MANUFACTURE OF CACHETS.

For some reason or other most of these are relegated to the Machinery Gallery, while one, which some might regard as the chief, is placed in a good position in the French Pharmaceutical and Chemical Court. The latter is that of LIMOUSIN & CIE., 4 Rue des Haudriettes, Paris, and is rather interesting, as it shows the apparatus which Limousin uses, as well as some of the cachets, filled and unfilled. Amongst

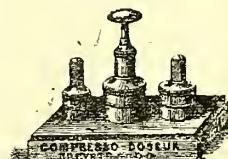
a variety of odds and ends shown in the two cases belonging to this firm are what they term "Ampoules hypodermiques procédé Pasteur." We give a drawing of one of them. They struck us as being an excellent idea for the purpose of keeping hypodermic solutions absolutely free from micro-organisms, and in a convenient form. The ampoules are made of glass, and when they are to be filled they are sterilised, and a fresh solution is used for filling them. Each ampoul is hermetically sealed, labelled, and is supposed to contain a hypodermic dose of the solution.



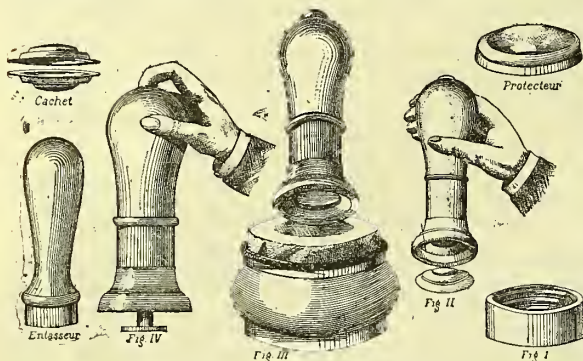
Those which Limousin & Cie. show are morphine, cocaine, and ergotin. Some deny the claim of this firm to the invention of the cachet, and it would not be fair not to recognise the fact that as far back as 1853 M. Guillaërmond, of Lyons, invented the *Enzyme*. Although it is so long since cachets were introduced and became popular in France, for some reason or other they have never come into favour in England, and yet the English public are as fond of taking their medicine pleasantly as the French. Cachets are a real want in English pharmacy. In the case of such insoluble drugs as phenacetin and sulphonal it is a very easy thing for dispensers to send out powders, but then it is most tantalising for a patient to mix them. In either case cachets are excellently adapted for dispensing the powder. What we want to do, and too often forget, is to place the remedy in the patient's hand so that he may take it in the most pleasant fashion, and land it in the stomach as pure as possible. This applies to many other powders—such as charcoal, magnesia, and rhubarb—which are unsuitable or obnoxious in mixture or pill. Now, a cachet is not a hard thing to swallow. We know that there are many in this country who use wafer-paper, and they manage to put the medicine in a sheet of it fully three inches in diameter, and to swallow that folded up. Now, why should they not swallow a soft and moist enzyme of the size here shown? This is the No. 1 cachet made by JEAN DIGNÉ & CIE., of Marseilles, and there are one smaller and two larger sizes. The cost of cachets is a mere trifle—two or three shillings per thousand—and the filling of them is by no means troublesome. The apparatus, which goes under the trade name of "Expéditif Digné," is contained



in a neat little case, and consists of the grippers which enable the dispenser to seize, wet, and fix the cachets without touching them with his fingers, as shown in the figure above. An equally important piece of apparatus is the "compresso-doseur," for moulding the powdered medicine into the shape of the cachet, so as to diminish the size of the dose, as well as facilitate the sealing of the two parts. We may explain how the cachets are filled by means of a series of illustrations, exhibited by S. CHAPIREAU, 18 Rue du Château, Lilas, who



has a very superior collection of his manufactures in the Machinery Gallery. First placing a cachet (it is pretty well known that these are made of rice-paper) in the cup (fig. 1), the dose of the medicine is put into it; then a second cachet is lifted with the gripper (fig. 2), the edges are wet by touching the damper (fig. 3), and it is then pressed upon the powder and cachet contained in the cup; the two unite, and, lifting the cachet out with the gripper, pressure of the button on the handle (fig. 4) releases it. Sometimes it happens that, if the quantity of the powder is large, a little of it is pressed upon the edge of the cachet, and to obviate this the protector, or



filler, is used, whereby the powder is placed exactly in the centre of the cachet. With still larger quantities of powder it is necessary to use pressure, and for this purpose presses (*entasseurs*) corresponding in size with the different sized cachets are supplied. In using these a protector is placed over the cachet, the powder then put in, and strongly pressed before the second cachet is fixed. Digne's compressor is well designed for this purpose, enabling the operation to be performed with great ease and quickness. We were much struck with another cachet apparatus exhibited by E. GORLIN & FILS, 51 Rue de Temple, and intended for retail sale to customers who wish to cachet the dose of medicine as they require it. In this case the cachet is capsular, or half eggshaped, and the two parts are in one piece, as shown in the illustration. The lower half is like a spoon, the upper is a flat lid. Twenty-five cachets, with a spoon and mould for closing the cachet, are sold for 1 franc. The spoon and mould are made of lead, but they are neat and serve their purpose admirably. Gorlin's cachets, or wafer capsules, are used for liquids as well as solids, and we may quote here the directions which are given to purchasers:—

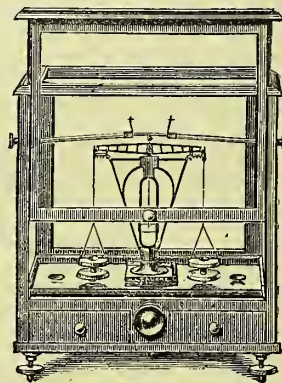
1. Put in the small spoon enclosed in the box, the quantity of liquid to be taken.
 2. Place on the open mould a wafer capsule, wet its surface entirely with your finger dipped in water; pour out the liquid in the capsule, being careful not to touch the edges; close up the mould, and press gently on the cover.
 3. Open the mould, deep the capsule in a glass of water, let it soften a little and then swallow it using a table spoon in which leave a little water.
- Apply same directions to solids, powders, pills, &c.

We give the directions as they are printed, and can say from experience that the operation is done in less time than the explaining of it, and as simply. Gorlin & Fils tell us that they manufacture about 600,000 of their "capsules azymes" per month, a number which necessitates the use of from thirty to forty sacks of farina in that time. They have an extensive business with South America, particularly in Brazil and the Argentine Republic. These, then, are some ideas on cachet making and filling, and we should be pleased if greater attention were given to the subject by English dispensers. A word here to those who are visiting the Exhibition. The particular spot of the Machinery Gallery where the cachet apparatus is to be seen is rich in pharmaceutical and chemical apparatus, and we should have liked to have said more about some pieces. It is impossible to do this, however, without sketches, and, unfortunately,

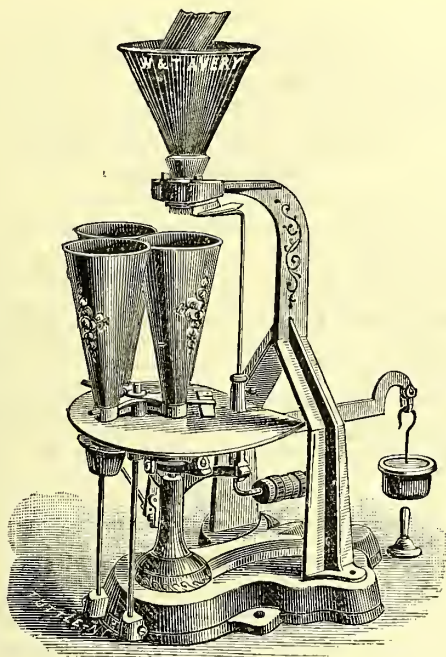
the French mind is unable to grasp the idea that a description without a sketch is as useless to buyers as it is to imitators. At this section of the Exhibition one of our representatives had the company for an hour of a common policeman, with his sergeant, and a few Exhibition attendants, all of whom loyally laboured to impress upon him their horror of "a chiel among them takin' notes." It is not difficult to put these gentlemen down, but their presence is not conducive to quiet work, especially in the heat of a Parisian summer's day. If any go through the same experience we advise them to walk over to

THE ENGLISH EXHIBITS,

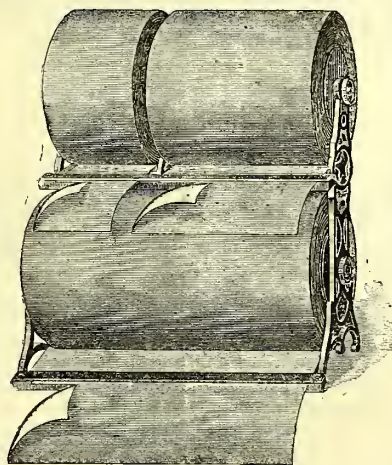
where they can at least have the comfort of the calm atmosphere which surrounds their countrymen. On the floor of the hall there are not many exhibits of pharmaceutical interest, but what there are may be mentioned. We were pleased to notice a splendid installation of aerated-water machinery by BRATBY & HINCHLIFFE, of Manchester, which is thoroughly consistent with the reputation of the firm. It is needless to enumerate the different pieces of apparatus shown—the manufactures are so familiar to our readers—but we could not help noticing that this was the only exhibit of the kind in the English group, and on the day that our representative was looking around, the firm's attendant had booked an order from a sightseer from South America. Beside this exhibit is one by W. & T. AVERY, of Birmingham. The visitor is first attracted to this by the Snelgrove electric weighing-machine, which almost invites him to try his weight. The machine is self-indicating and self-operating, as the adjusting and indicating mechanism is operated by an electric current, which in no way interferes with or detracts from the delicacy of the balance. There are no wheels capable of producing friction and thereby affecting its precision. The act of placing any substance on the platform causes the instantaneous display of a group of figures on a dial indicating the exact weight, in the case of one of the machines shown, to the one-tenthousandth part of the maximum weighing capacity. It is interesting to watch the display of the figures; they do not jump into place all at once, but the fractional figures appear hesitatingly, as if there were some brain-directed influence within it which feared to show one's weight except to the exact number of grammes. The other objects in this exhibit are principally specialities, and we were glad to notice amongst them several chemical and dispensing balances. One of these we were especially struck with on account of its compactness and delicacy. It is a short-beam assay balance, carrying 2 grammes, and sensible to 0.00015 gramme. The structure of this balance is excellently shown in the illustration; but one point deserves special mention, that is the structure of the "arrest." It is well known that these very necessary accompaniments of a delicate balance are liable on withdrawal to more or less agitate the beam. Messrs. Avery have remedied this defect by making the point of contact of the arrest with the parts it is intended to relieve of eight jewel-pointed pins, four on each arm of the arrest, thus reducing the surface of contact to a minimum. Four of these points lift the beam almost imperceptibly from its centre-bearing, while the other four pins perform a similar office for each shackle by slightly raising it from the end centre, or knife-edge, of the beam. The pins are finely adjusted so as to come simultaneously into contact with the different parts, and, as a consequence, when vibration is arrested by these supports the beam is quite motionless. When the arrest is withdrawn the beam is perfectly still if the weights on the pans are equal. A totally different, but not less interesting, apparatus is Avery & Clawson's patent weighing and packing machine, for powders, seeds, and the like. This is a marvellous piece of mechanism, and a wonderful saver of manual labour, a



small machine weighing and filling many hundreds of packages per hour. The manner in which it does this is



simple. The powder, or whatever it may be, is carried into the hopper, and from this it falls into the package below, so that when the desired weight has gone in the balance turns, and, at the same time, a long-arm lever brings a disc into the mouth of the hopper, which effectually closes it. Machines of this kind are now extensively used, and are made so that they can be worked by steam-power, every part of the operation to the bringing up of the packages being done by mechanism. In the one which we illustrate there is a swivel with three packet-holders, each one of which affects the balance when only under the hopper. Still on the floor of the hall we notice an exhibit by the MERCHANTS' ROLL-PAPER, PRINTER, & CUTTER COMPANY, of Cincinnati, Ohio, which should interest druggists. An illustration will speak better than words. This shows a stand with three



widths of paper. When sufficient of any size is drawn out it is cut with a steel knife, which is easily relieved for further supply. The company make a stand on exactly the same principle, but with a cylindrical rubber printer or stamp in front, which prints on the paper as it is withdrawn from the roller. This, the makers say, "is new, neat and nobby, useful, economical, and durable; saves time, paper,

and money. Pays for itself in sixty days, as it saves 25 per cent. of your paper, and advertises your business."

FILTERS

may now occupy our attention. There are some of SLACK & BROWNLOW's make at Bratby & Hinchliffe's stand, and DOULTON & Co., of the Lambeth Potteries, have an assortment of forms of their carbo-manganate filters, which are not only notable for their water-purifying properties, but for their elegance of design and finish. These exhibitors also show examples of their earthenware chemical apparatus. In the gallery of the hall the SILICATED CARBON COMPANY, Battersea, have a nice group of filters, which surpasses in variety any that we have seen lately. Parisians ought to look carefully at this spot of the Exhibition, for they have every reason to be ashamed of their water-supply, and to shun it unfiltered. The contrast between Paris water before passing through a silicated carbon filter and after is somewhat marvellous, and we should think that even Parisians would be tempted to drink water once in a while if they could always get it in the latter condition. BARSTOW & Co. are close by with an exhibit of their filters, in which old red sandstone is part of the medium—it does its work excellently, by the way—and the MAIGNEN COMPANY have a fair show at the same place.

M. PIERRE MERLINO, of the firm P. Merlino & Fils, the agents in Paris for the Reggio-Calabrian manufactures of peel essences, informs our agent in Paris that he, and not Mr. Rizzuto, was the gentleman with whom the writer of the article had the interview. M. Merlino it was who served with Garibaldi, and we regret that through a confusion of names he should figure in the article as Mr. Rizzuto.

SERVIAN QUICKSILVER.

THE attention called to the new Servian quicksilver industry by the floating of the Avala Quicksilver Mines Company (Limited) in London recently, with a capital of 180,000*l.*, gave a recent visit made by us to the Servian Section of the Paris Exhibition a more than passing interest. The courteous Commissioner delegated by his Government to represent the disquieted little country at the world's greatest fair, M. Miloche Hadji-Popovitch, who is also an attaché to the Servian Minister of Commerce, showed much desire to furnish all the information in his power, and it is to himself and to Professor Ljubomir Kleritj, who negotiated the formation of the new company, that the greater part of the following details are due.

"Yes," said Mr. Popovitch, after some conversation, "we hope to see some curious changes in the quicksilver market, though it need hardly be said that certain wealthy English capitalists regard the progressing operations of the new company with jealous eyes, and will doubtless cause some trouble; but the Professor here has watched the operations of the mine from the commencement: let him first tell you of what is going on at Avala."

Professor Kleritj is a tall man, of majestic appearance and earnest manner; from him we learnt that the Avala mines are situated fifteen miles south of Belgrade, and about two from the main railway line which connects that city with Paris and Constantinople. The mines are to be found at the foot of the mountain from which it takes its name, itself deriving its present name from an ancient castle, now in ruins, dating its origin to a century or two B.C., and with which many interesting legends are connected. The mines were discovered in 1883, the intervening five years having been spent in experimental working, at a cost approaching 14,000*l.* The original private company consisted of Mr. G. Weifert, a Belgrade brewer, and two of Professor Kleritj's *confidères* at the University of that city, Messrs. S. Morkowitch and S. M. Losovitch.

At the present time there are five veins of quartz in which the quicksilver is found, the largest of these being about 60 yards in width and 700 yards in length, the first mine having reached a depth of 100 yards. Nor is this all, for in the same mineral is found a considerable amount of sulphate

of nickel, besides a certain quantity of the natural metal. One hundred and fifty thousand tons of mineral have been raised, giving an average yield of 27 lbs. of quicksilver per ton, the whole of which is said to equal the best qualities found in the cinnabar mines of Almaden, Spain, and the New Almaden mines of California. Sixty miners and an engineer are constantly at work, the operations going on both day and night, now showing a daily raising of 15 tons. Four kilns and ten retorts, with a powerful steam-engine, seem at present to constitute the principal working plant of the mine. At Avala the extraction of the metal from its ore is effected by oxidation and reduction, a process which appears to differ from that in use at Almaden, where great waste occurs, owing to an imperfect method of condensation, while at the Servian mines a loss of 66 per cent. only is sustained. Twenty-five bottles of quicksilver are produced weekly, each bottle containing 70 lbs. net weight of the metal. These bottles have a similar form and style to those used in England for the nitrous oxide gas. Five hundred of them recently found a ready sale on the London market, while two hundred have been despatched to China. At present, however, the company seems disposed to limit its sales to Vienna, where prices range somewhat higher than elsewhere, besides the great economy obtained in the matter of carriage, as compared with London, &c. It is not to be supposed that the company in question has been without competitors, but these, it would seem, from some unexplained reason, have not been successful. The principal one was the Kipanj syndicate. A former English concern, too, which worked the copper mines at Meidenpeck some years ago, came to grief; this was the first, and up to now the only, attempt by capitalists from this country to develop the mineral resources of Servia. We have searched in the United States and Spanish courts, consulted the officials, and perused the catalogues, but can hear of no other quicksilver exhibit. This is a matter of regret, as it would undoubtedly have been interesting to give some information from other sources.

Personalities.

THE BRITISH PHARMACEUTICAL CONFERENCE is to be congratulated. The President's address is sure to be characterised by unmythscience.

THE SAUCE AND THE CHURCH.—Mr. Perrin, of Worcester, and his family have contributed 14,000*l.* towards the cost of the new church at Barmouth, the memorial stone of which has been laid by Princess Beatrice.

MR. K. JAMES has sold his business at Beverley to Mr. T. W. Field, of that town. Mr. James has bought from Mr. Moyses his business at 9 Swaby Road, Wandsworth Common, S.W.

MR. JOHN MCKESSON, JUN., has been appointed by the Mayor of New York one of the World's Fair committee. There seems no doubt that a big show will come off at New York in 1892. Mr. McKesson represents the drug and spice trades, along with Messrs. T. F. Main and Darwin R. James.

MR. ALEXANDER CLEGHORN, who for many years was in business in Cupar Fife, and went out to the Cape some years ago on account of his health, has been admitted a partner in the firm of Reeler & Son, pharmaceutical chemists, Cape Town.

THE "TUSON" FUND, promoted out of respect to the late Professor of Chemistry at the Royal Veterinary College, has been wound up with a total amount collected of 994*l.* 0*s.* 7*d.* With 750*l.* an annuity of 63*l.* 15*s.* has been purchased for Mrs. Tuson, and the remainder, except 17*l.* 10*s.* 1*d.* incurred for printing, stationery, postage, &c., has been or will be paid on her account.

POISONED BY POTATO-FLOWERS.—A cottager's child, at Farnham, Hants, on Sunday picked some flowers from potato-plants in a garden, and ate them. The child died immediately afterwards.

Gazette.

PARTNERSHIP DISSOLVED.

Gilbertson, Henry, & Sons, Old Bailey and St. Andrew's Street, City, druggists' sundries manufacturers.

THE BANKRUPTCY ACT, 1883.

RECEIVING ORDERS.

Alewood, Edwin, Swansea, chemist and druggist.

Burton, William, Bucklersbury, City, and Grotes Buildings, Blackheath, physician.

English, Thomas Barry, Canterbury, physician and surgeon.

May, George Thomas, Tunstall, surgeon.

McDonagh, James Samuel, Clement's Inn, Strand, and Forest Road, Chislingford, late of Colosseum Terrace, Regent's Park, doctor of medicine and surgeon, and commission agent.

FIRST MEETING AND PUBLIC EXAMINATION.

May, George Thomas, Tunstall, surgeon—Sept. 6, Official Receiver's offices, Newcastle-under-Lyme; Sept. 13, Town Hall, Hanley.

ADJUDICATION.

English, Thomas Barry, Canterbury, physician and surgeon.

APPLICATION FOR DEBTOR'S DISCHARGE.

Clark, Charles Francis George, jun. (trading as C. F. G. Clark & Son), Dudley, wholesale chemist and druggist—Sept. 23, Dudley.

ORDER ON APPLICATION TO APPROVE SCHEME.

Griffin, George (trading as the Self-opening Tin Box Company), Mandeville Place, St. Marylebone, and Albion Works, King's Cross, civil engineer—scheme approved, subject to certain conditions.

NOTICES OF DIVIDENDS.

Carter, Thomas, & Carter, James Harrison (trading as Carter Brothers), Sheffield, druggists and drysalts—second and final div. of 10*½d.* (3*s.* 4*½d.* on new proofs), Aug. 28, Official Receiver's offices, Sheffield.

Ricarby, Arthur George, Walton-on-the-Naze, chemist and druggist—composition second instalment of 2*s.* 6*d.*, Aug. 29, Official Receiver's office, Colchester.

Shaw, David (trading as the Worcester Mineral-waters Company), Worcester, aerated-waters manufacturer—first and final div. of 1*s.* 1*½d.*, Sept. 4, Trustee's offices, 5 Foregate Street, Worcester.

Tucker, Edwin, Bristol, importer of sponge and sealing-wax, and post-office letter carrier—first and final div. of 10*½d.*, Aug. 16, Official Receiver's office, Bristol.

Trade Notes.

MESSRS. MCKESSON & ROBBINS, of New York, are announcing reduced prices for their "McK. & R." capsuled quinine pills. They cabled to us to make this announcement in their advertisement in our issue of July 27, but their instructions were not clear.

QUININE PROFITS.—We are informed that the amount of 184,126*m.* (9,263*l.*), which we stated last week, on the authority of a German journal, to have been the profit of the Auerbach Quinine Works during the financial year 1888-9, has been the gross profit, and that, after deducting working expenses, &c., only a very much smaller sum remains as net profit. We are making further inquiries into the subject.

An interesting sale of drugs by auction is announced in our supplement for Thursday next at 12, at 3 Jewry Street, Aldgate. The goods offered will consist of the salvage recovered from the late fire at Messrs. Baiss Brothers & Co.'s warehouse, and comprise a great variety of drugs, oils, medicines, &c. At the same time and place about 9 tons of isinglass, recovered from the premises of Mr. James Vickers, of 6 Devonshire Square, after the fire on those premises, will be offered by auction.

DENTISTS IN CONGRESS.

THE annual congress of the British Dental Association has been held during the past week at Brighton. A goodly gathering of members and their friends assembled on Wednesday evening, August 21, at a reception given by the President (Mr. S. Lee Rymer, L.D.S. Eng.) at the Pavilion. This was a very successful entertainment. The following morning, after some business preliminaries were over, the reading and discussion of papers commenced, and was continued till Friday evening. The subject of

ANÆSTHETICS

occupied a large portion of the time. Dr. Cruise advocated the use of ether, on account of its almost absolute safety, and the facility with which it could be administered in a semi-erect posture, as well as its stimulating effect on the heart. Mr. Bowman Macleod expressed equal satisfaction with chloroform, which, in his hands, was the simplest and most satisfactory agent in dental operation. An interesting paper was read by Dr. Fredk. Hewitt, of London, on "Certain Anæsthetic Mixtures, with special reference to those in use in dental surgery." While strongly recommending the proper combination of nitrous oxide and ether for prolonged operations, he advised for ordinary use a trial of a mixture of $\frac{1}{2}$ oxygen and $\frac{1}{2}$ nitrous oxide, administered under a pressure of about 7 lbs. on the 8 gallons of mixed gases. The effect he states to be a more complete anæsthesia, free from any objectionable or distressing symptoms, and with a certainly increased duration in its action and safety in administration. A thoroughly practical and portable holder for this gas under slight pressure is a desideratum. It was pretty unanimously agreed by all the leading authorities that nitrous-oxide gas, whether alone or in combination with oxygen, is a perfectly safe gas for dental purposes, and may be used with comparative safety, even in cases of heart disease, where the use of chloroform would be impossible.

After papers by Mr. Reinhardt on "Vulcanite," and by Dr. Cunningham, of Cambridge, on the "Transplantation of Teeth," Dr. Bonwill, of Philadelphia, gave his experience in

EXTRACTING TEETH PAINLESSLY BY MEANS OF RAPID RESPIRATION.

He said for some ten years it had been his constant practice with his own patients to make them breathe very rapidly for a minute or two—say a hundred respirations per minute—when, without rendering the patient unconscious, he could extract the tooth absolutely painlessly. The doctor had an opportunity of demonstrating his *modus operandi* at the Dental Hospital the next morning, but he was signally unsuccessful with the patients with whom he experimented.

OTHER TOPICS.

Mr. Pedley advocated the use of iodoform as a disinfectant and antiseptic in preparing teeth for fillings when the pulps were decayed and the roots were diseased.

Mr. D. E. Caush demonstrated the cutting of sections of teeth and mode of mounting them as microscopic slides, and spared no trouble to explain the whole process to the visitors; whilst Messrs. Baker, of London, furnished a large number of microscopes with which to view the specimens.

The demonstrations on Saturday morning were well attended. Dr. F. Hewitt showed the merits of his process of gas and oxygen in a most satisfactory manner. Several gentlemen illustrated the different varieties of mallets used in gold fillings, the one most admired perhaps being a pneumatic one made by Mr. Jones, L.D.S., Cambridge, the air to work which was forced in by a foot-blower. There was a large number of engines on view, some worked by electricity, others by water, but the majority by foot power. The dental engine exhibited and made by Hallam & Son, of Lisson Grove, was pretty universally admitted to be one of the cheapest and best on show.

All the modern styles of operating chair were on view, and dentists could be accommodated with any variety, from the exceedingly neat, handy, and cheap one of Messrs. Jamieson, at about 11*l.*, to the very elaborate American, worked by hydraulic power, at 50*l.*, the smooth and steady

movement of which was generally much admired. Mr. Gartsill, of Penzance, and Mr. Jones, of Cambridge, both exhibited interesting specimens of bridge work; the latter gentleman fitting a case in a patient's mouth, so that the members could see the *modus operandi*.

The meeting was wound up with a pleasant excursion in a steamer. The Association is to meet next year at Exeter.

TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, at any time within one month of the date of this journal, give notice in duplicate, at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." All communications to be addressed to H. Reader Lack, Esq., Comptroller General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

From the "*Trade Marks Journal*," August 28, 1889.

"FACOPATE"; for paints, varnishes, &c. By Lizzie H. Goggs and T. T. Irvine, trading as the Fine Art Company, 90 Bold Street, Liverpool. 89,098.

"DEVELOPOIDS"; for compressed chemical tablets for the development of photographic plates and papers. By T. H. Powell, 116 Denmark Hill, S.E. 89,818.

"PALFREYMAN'S RUST PREVENTIVE," within figure of a stirrup: for compound to prevent rusting. By W. H. Palfreyman & Co., 87 Piccadilly, Manchester. 89,908.

"ROGER'S COPYING PREPARATION," and other wording on label; for a chemical preparation used in copying letters. By Roger's Copying Company (Limited), 20 Ludgate Hill, E.C. 90,039.

"THE FLY CEMETERY, OR HONEY FLY GUM-PAPER," and other wording; for fly gum-paper. By Tunbridge & Wright, 84 Broad Street, Reading. 89,024.

"MOONSEED PILLS" and "MOONSEED OINTMENT," with other wording under figures of the plant; for pills and ointment. By A. E. Powell & Co., Swindon. 89,475.

"AVISA," and other wording on label; for medicated paper. By R. Hannan, 42 Bath Street, Glasgow. 89,507.

"DYTIL"; for a cure for corns and warts. By J. H. Kyezor, trading as the Dytill Corn Cure Company, 5 Gascony Avenue, Kilburn, N.W. 90,153.

Figure of a flying raven; for liquorice sticks. By Taylor White, Friar Wood Works, Pontefract. 89,411.

Monogram on shield; for aerated waters. By Jane A. Yates, Springfield, St. Anne Street, Liverpool (88,321). Also for same, (1), "K O P S," on round label. By H. Lowenfeld, trading as Kops Non-Alcoholic Ale Company, 49 Queen Victoria Street, E.C. (88,880). (2) Designation of depositors and figure of Dundee arms, on round label. By the Dundee Aerated Water Manufacturing Company (Limited) (89,453).

"SWEET LAVENDER," other wording, and a portrait on label; for perfumery. By R. Hovenden & Sons, Berners Street, W. 87,001.

"THE SCENT OF THE LILIES" and "THE SCENT OF THE HAYFIELDS," on labels which are representation of fields. By T. W. Carnie, 12 Laurence Pountney Lane, E.C. 87,090-92.

"ZENETA"; for perfumery. By S. B. Horncastle, 71 East Street, Brighton. 90,166.

"KINGSTON"; for perfumed soap. By Wood & Wainwright, North Street, Hull. 90,181.

"APYTHOT"; for preparation for the moustache. By J. S. Collins, Grand Hotel, Trafalgar Square. 90,369.

"COLONIAL INFANT'S FEEDING BOTTLE," other wording, and picture on label; for feeding-bottles. By May, Roberts & Co., 9 Clerkenwell Road, E.C. 89,122.

TAR WATER.

It would appear from history that bishops and reverend gentlemen are prone to pose as the discoverers of new beverages, &c. It is not a very long time ago that the Bishop of Bangor announced to a confiding world that tea was an injurious and pernicious drink, and that oatmeal and water was a useful and fitting substitute. In the latter part of the last century, strange to relate, the Right Reverend George Berkeley, the Bishop of Cloyne, published several works on the medicinal virtues of tar water, the most notable one being entitled, "Siris; or, a Chain of Philosophical Reflections on Tar Water, &c."

Tar, balsams, and other terebinthinate products have ever been held in popular estimation, especially in Northern maritime countries, where the pine is known to flourish. Theophrastus, a Greek writer of the ancient world, gives a circumstantial description of the preparations of tar. The composition of tar, which is obtained by the destructive distillation of the wood of the Scotch fir and other species of pines, is said to be very complex. According to Sir A. Garrod, in his work on *materia medica*, the substance contains altered resin, or colophonic acid, and an empyreumatic oil in which numerous substances, such as creosote, paraffin, picamar, kapnomor, eupione, &c., have been discovered. Water agitated with tar acquires a light yellowish or pale brown colour, with a taste and odour of tar, and an acid reaction. Pyrocatechin is asserted to be one of its ingredients. Bishop Berkeley's recipe for making tar water was as follows:—"Pour a gallon of cold water on a quart of liquid tar in a glazed earthen vessel, and stir and mix them thoroughly well with a ladle or flat stick for the space of three or four minutes, after which the vessel must stand forty-eight hours, that the tar may have time to subside, when the clear water is to be poured off and kept for use, no more being made from the same tar, which may still serve for common purposes."

It is asserted by modern therapeutic authorities that tar acts both internally and externally as a stimulant, and as such it has been frequently employed as a useful remedy in certain troublesome skin diseases. Employed internally in the form of a syrup, or as an inhalation, this substance has lately attracted much attention as an efficacious remedy in bronchial affections, particularly emphysema and winter cough.

Bishop Berkeley it was, however, who in 1744 brought tar water into general use. He vaunted it as a marvellous remedy for all diseases under the sun. It is not to be wondered at, therefore, that, after having enjoyed a world-wide notoriety and, at the same time, a vastly exaggerated reputation, resting mainly on this good man's statements, a reaction should have set in, and that the remedy should have fallen into unmerited disuse. The use of tar water, in fact, has now become almost a thing of the past.

The publication of Bishop Berkeley's work created at the time a great deal of attention, and a still greater amount of criticism, much of which was merely virulent abuse levelled at the head of the reverend prelate.

The medicine or beverage was directed to be taken in quantities of half a pint, fasting, in the morning, and a second half-pint two hours after supper. The ordinary dose, however, as cited in modern text-books, is from 1 to 4 oz. Should the morning draught occasion nausea, less quantities at more frequent intervals were given, and the morning dose not persevered in. The liquid may be continued for any length of time without hurt, and, in fact, many of the sufferers who began it evidently appeared to have acquired a taste for the liquid, and to have continued its administration for a considerable length of time after their recovery.

Its chief and most remarkable use was considered to be as a remedy for all fevers, especially small-pox, for which it was recommended both as a preservative and as a preparative. For ague the remedy was to be taken in the fit, and during the intervals to prevent a relapse. In chest affections, such as consumption, consumptive cough, pleurisy, and pneumonia, its action was asserted to be magical. As to derangements of the stomach, Dr. Berkeley says he "never knew anything so good for the stomach as tar water. It cures indigestion and gives a good appetite; it is an excellent

medicine in asthma; it imparts warmth, and quickens the circulation without the production of febrile heats, and it is, therefore, a useful pectoral and balsamic, as also a deobstruent remedy in cachectic and hysteric cases." "It has been known to cure dropsy, after the failure of other remedies; it is highly useful in cramps, flatulent colic, and paralytic numbness," and, "unlike the fits of mirth produced from fermented liquors, the calm cheerfulness arising from this water of health (as it may be justly called) is permanent. It is a good cardiac remedy, is useful in both diarrhoea and constipation;" and gout, which the author attributes to a faulty digestion, he thinks should be greatly benefited by the use of the water. Tar is an excellent preservative of the teeth and gums; it sweetens the breath, and clears and strengthens the voice.

There are three sorts of people, the Bishop concludes, to whom he would peculiarly recommend the use of tar water—viz., seafaring people, to prevent them from contracting scurvy; men of studious and sedentary lives; and ladies, to whom, by the way, he is far from complimentary, for he states that "the remedy will give charitable relief to the ladies, who often want it more than the parish poor, being many of them never capable to make a good meal, and sitting pale, puny, and forbidden, like ghosts at their own table, victims of vapours and indigestion."

These are specimens of Bishop Berkeley's advocacy of his favourite remedy. Turning now to its reception, we find, first, from a small pamphlet, entitled "The Medicinal Virtues of Tar Water fully Explained by G. B.," that tar water soon found its way into the hands of an enterprising druggist. The following testimonial from a patient who had tried tar water savours of "modernism":—

"I have for a long time laboured under a weak stomach and bad digestion, which brought upon me a vast depression of spirits and a consumptive constitution, attended with vast swelled legs. But having purchased a bottle of tar water of you, the second glass I took found out my disorder in my stomach, and (thank God and the good Bishop!) brought from thence what I would not have there again upon any consideration, and is not fit to be mentioned, and have by continuing it, first once and now twice a day, restored my appetite and spirits to admiration, and almost quite abated the swellings in my legs; for which I publicly return thanks to the generous benefactor."

This pamphlet concludes with the notice that "the right genuine tar water is sold at the Ware-house behind the Thatch'd-house-tavern in St. James's Street, &c., price sixpence a quart bottle sealed up with directions."

Another small volume, entitled "Means of Preserving Health to a Good Old Age, &c.," is nothing more than a brief *résumé* of Berkeley's statements, published in 1840, in which also a patent medicine termed "Dr. Berkeley's Aromatic Tar Pills," which are asserted to be made from Barbadoes tar and aromatic herbs, gums, &c., is advertised. A note at the beginning of the book by his biographer sets forth that "the Bishop's whole life was one uninterrupted scene of benevolence to the bodies and souls of his fellow-creatures; the discoveries he made in the best means of preserving health were always recommended by experience." A long string of about seventy-five ailments, in which these "celebrated" pills are useful, is given. They operate, so it is here stated:—

1. By cleansing the stomach and bowels of foul matter without occasioning nausea.
2. By removing all impurity of the blood.
3. By maintaining a due and uniform circulation of the blood.
4. By strengthening the stomach and organs of digestion.
5. By creating an appetite and relish for food.

Perhaps some readers will recognise the foregoing style as somewhat familiar.

In 1793 Dr. Prior published a work entitled "An Authentic Narrative of the Success of Tar Water in Curing a Great Number and Variety of Distempers." The book is crowded, from beginning to end, with remarkable cures wrought solely through the agency of tar water. Many of the statements, several of which were sworn to, are most remarkable. Of course the clergyman figures with prominence in its pages. One reverend gentleman states that he was cured of ague solely by using tar water, and that he was never in better spirits in his life than when taking it. Therefore he com-

pare it to Homer's Nephenthe. A second clergyman relates the case of a girl suffering from cough and dropsy, who was given over to die, to whom as a last resort he advised tar water, when she recovered. The title-page gives the following eulogy on the Bishop:—

Oh learned Berkeley! who enough can praise
Thy gen'rous labour? thy instructive page,
Our steps directing to the source of health?
The fair and beauteous pine in vain has shed
Its precious juice, till thou, with curious search,
Explo'd its curious qualities, and taught
Mankind the wholesome secret. Thus hast done
A deed well worthy everlasting fame.

Among the adverse criticisms on the Bishop's work we find a short treatise published by a physician of the time, who virtually urges the worthy prelate to attend to spiritual affairs and let medicine alone. This volume is entitled "A Cure for the Epidemic Madness of Drinking Tar Water, lately Imported from Ireland by a Certain R—t R—d Doctor, in a Letter to his L—p." The book is mainly devoted to discursive argumentation, bordering on abuse, without any attempt to disprove the Bishop's statements.

Another pamphlet, entitled "Anti-siris," is very abusive and almost scurrilous. It goes into details about quackery, and is especially severe on those of the religious fraternity who turn their attention to the use of medicine, and on the Bishop of Cloyne in particular. On page 19 it is remarked that "there is always some arch QUACK that carries the bell"; "in this country there is a mode of fashion in drugs and physic as well as in clothes and diversions." We learn that a certain Dr. Slayer—a good name, perhaps, for a doctor in those days—wrote a learned treatise on sugar, which was recommended as a panacea, and which, so the book tells us, "the public swallowed voraciously till it had rotted half the teeth of the nation." When sugar went out of fashion "it was supplanted by water"—pure native element—the virtues and excellences of which a reverend "quack" (Rev. Mr. Hancock), in a treatise on the use and excellences of water, took "the charitable pains to promulgate." He asserted it to be a panacea of panaceas, and that it would "cure all distempers ever known in the world." Many people hold much the same opinion with regard to water at the present day.

Bishop Berkeley evidently anticipated that his work on tar water was likely to meet with considerable opposition, for he says in his "Siris" (sect. 68), "nothing is more difficult or disagreeable than to argue men out of their prejudices; I shall not, therefore, enter into controversies on this subject, but, if men dispute and object, shall leave the decision to time and trial."

Whether tar water does or does not possess the remarkable properties attributed to it in the last century is hardly possible to say. At least, it might be urged, it is easily prepared and harmless enough if used with discretion. Perhaps the readers of this journal may be induced to give it a trial, using it as a pick-me-up or restorative against the depressing influences of cutting prices and patent-medicine grievances.

BANKRUPTCY REPORTS.

Re ELIZA OKILL, 3 Newcastle Street, Strand, Chemist.

At a sitting of the London Bankruptcy Court, held on Wednesday last, before Mr. Registrar Giffard, this bankrupt attended for public examination upon accounts showing unsecured debts 526*l.* 16*s.* 10*d.*, and assets *nil*. Mr. Howell conducted the examination for the Official Receiver, and the bankrupt stated, in the course thereof, that the business prior to April, 1888, belonged to her husband, who died at that time. The business was then insolvent, as there was not sufficient to meet all the debts, but as she had only just put 200*l.* of her own money therein, she decided to continue it under management, hoping to do so successfully. During the husband's lifetime she had assisted him in the business, which had never been a very good one and was very fluctuating. In addition to the money advanced by herself other sums had been lent by friends, those amounts forming part

of the present indebtedness. After continuing the trading for twelve months under management, the business was sold as a going concern for 180*l.*, and a large portion of that money devoted to payment of rent, rates, taxes, &c. No books of accounts were kept during the husband's lifetime, but a cashbook had since been kept, showing the receipts and expenditure. When the business was sold there was a bill of sale in existence covering the furniture and some patent medicines, but the solicitor who conducted the sale knew of its existence, and provision was made for its repayment. Questioned as to her justification for continuing to trade after knowing her insolvency, the bankrupt said the business had been neglected by reason of the long illness of her husband, and she hoped under proper management to make it pay. There was no opposition by creditors, and the examination was ordered to be concluded.

Re S. B. TILLOTSON, Burnley, Chemist.

At the Blackburn Bankruptcy Court on Tuesday, August 20, Septimus Brown Tillotson, chemist, of Habergham, Burnley, presented himself for further examination. The deficiency was stated to be 816*l.* 16*s.* 2*d.*, the assets being 70*l.* 19*s.* 1*d.*, and the liabilities 887*l.* 15*s.* 8*d.* The deficiency account commenced with an excess of liabilities over assets on February 19, 1888, of 400*l.*; the business losses since had amounted to 200*l.*; while bad debts accounted for 20*l.*, household and sundry expenses of that character for a further 100*l.*, and advertising, &c., for the sum of 50*l.*

Re LEONARD THOMPSON, late of Thirsk, Chemist and Druggist.

At the Northallerton Bankruptcy Court on Monday, before Mr. W. T. Jefferson (Registrar), the public examination of this debtor took place. The bankrupt was represented by Mr. A. W. Cass, solicitor, Thirsk. In reply to Mr. Atlay, of Thirsk, the trustee of his estate, he said that he had received 1,700*l.* profit from his business, and had also got 2,100*l.* lent money, but he could not say what had become of the money, except that it had gone in trade. The examination was closed.

Re WILLIAM KELSEY, Barnsley, Chemist and Druggist.

THE first meeting of creditors in this estate was held on Wednesday at the offices of the Official Receiver, Barnsley. The report showed that the debtor had been in business for some years, and that he attributed his position to a falling off in trade and similar causes. The statement of affairs showed liabilities to the amount of 491*l.* 11*s.* 7*d.* These were made up as follows:—Unsecured creditors, 468*l.* 15*s.* 7*d.*; preferential creditors for rates and taxes, 15*l.* 18*s.* 6*d.*; for rent, &c., 78*l.* 18*s.*, of which 22*l.* 16*s.* is expected to rank for dividend. The assets were:—Cash in hand, 10*s.*; stock-in-trade, 300*l.*; machinery, trade fixtures, &c., 150*l.*; furniture, 70*l.* = 520*l.*, estimated to produce 450*l.*; book books, good, 15*l.* 18*s.* 1*d.*; doubtful, 4*l.* 15*s.* 4*d.*; estimated to produce 2*l.* 7*s.* 8*d.* Amongst the principal creditors were:—

	£	s.	d.
Ayrton & Saunders, druggists' sundriesmen, Liverpool	6	12	7
Billington, Shaw & Machen (promissory note) ..	125	0	0
Bleasdale, W., & Co., wholesale druggists, York ..	60	6	9
Blundell, Spence & Co., Hull, colour merchants ..	6	8	7
Bourne, Johnson & Latimer, sundriesmen, London ..	8	1	3
Burnett, G., painter, &c., Barnsley	10	5	4
Ellison & Scott, wholesale druggists, Hull	3	19	4
Goodall, Backhouse & Co., wholesale druggists, Leeds	7	7	9
Hill, Evans & Co., vinegar makers, Worcester ..	4	1	9
Lofthouse & Saltney, wholesale druggists, Hull ..	15	10	0
Maw, S., Son & Thompson, druggists' sundriesmen, London	10	0	1
Raines & Co., wholesale druggists, York	11	6	9
Simcock, T. W., sundriesman, Leeds	3	19	6
Southall Brothers & Barclay, Birmingham	13	17	2

The matter was left in the hands of the Official Receiver to realise the estate.

TRADE "SANITAS" MARK.

DISINFECTANTS

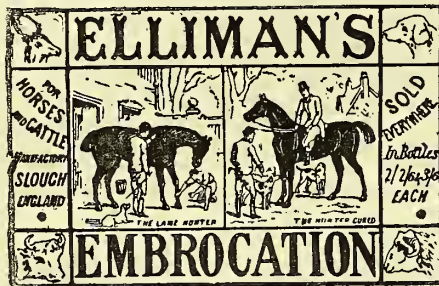
(FLUIDS, POWDER, SOAPS),
NON-POISONOUS, PLEASANT, AND BEST
Gold Medals, Calcutta 1884, Paris 1885, Antwerp 1886, Ostend 1888.

KINGZETT'S BACTERICIDES

Particulars sent on application to

THE "SANITAS" COMPANY, LIMITED,
Letchford's Buildings, Bethnal Green, London.

SHOW CARDS, 24×17 or 17×12,
Free to any Address in the United Kingdom.



See First Page, facing inside of front of Cover, in first issue of the month for latest particulars.

MEDICAL ELECTRICITY.



EVERY DESCRIPTION OF
Galvanic, Faradaic, and Electro-Magnetic
Machines and Electrodes, Galvano-Cautery and
Lighting Instruments.

Lists free. Descriptive Catalogue, 100 illustrations,
32 pages, 4 stamps.

GENT & CO., LEICESTER.

STERN'S PUMILINE

ESSENCE, EXTRACT,
JUJUBES, SOAP,
PLASTER (St. Dalmas).

62 GRAY'S INN ROAD, W.C.



Noakes' Tins

for Druggists' use.

See Illustrated Advertisement first issue of the month.

THE BEST NATURAL APERIENT.

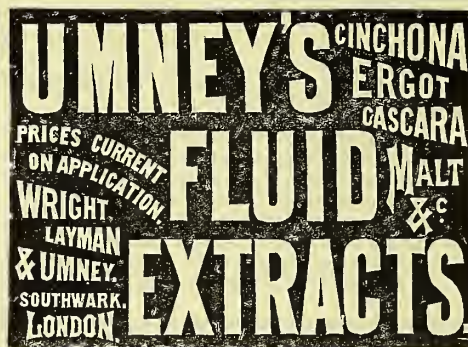
The APOLLINARIS COMPANY (LIMITED), London, beg to announce that, as numerous Aperient Waters are offered to the public with marks, names, and designations very similar to those which are used for the HUNGARIAN APERIENT WATER so long imported by them, they have now adopted an additional Label of their own, comprising their REGISTERED TRADE MARK OF SELECTION, which consists of

A RED DIAMOND.

This Label will henceforth also serve to distinguish the Hungarian Aperient Water sold by the Company from all other Aperient Waters.

DEMAND THE DIAMOND MARK.

Of all Druggists and Mineral Water Dealers. [1]



[1]

SPONGE! SPONGE!

THE MOST RELIABLE HOUSE IN THE TRADE.
The Best and Largest Assortment to select from.

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All orders throughout the United Kingdom are sent on approval Carriage Paid both ways, and selected to suit the requirements of intending purchasers.

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FINEST POWDERED PURE FULLER'S EARTH

In 56 lb. and 1 cwt. bags, 14s.;
In 7, 14, and 28 lb. bags, 16s. per cwt., bags included.
DELIVERED FREE IN LONDON. [1]

G. S. MUMFORD, FARRINGTON ROAD, E.C.

SILICATED CARBON FILTERS AERATED

PATENT MOVABLE BLOCK.

See Advertisement, page 13 (bottom folio).

*Fletcher's
Concentrated Liquors*

See DIARY, 1889,
Pages 17 and 18.

EDITORIAL NOTES.

THE INLAND REVENUE AND THE DRUG TRADE.

THE annual report of the Commissioners of Inland Revenue always contains some statistics of interest to chemists and druggists. This highly-organised body collected in the year ending March 31, 1889, a total revenue of 53,147,415l. Nearly half of this sum comes from excise, and nearly a quarter each from stamps and income-tax; land-tax figures for about one million, and inhabited house duty for close

on two millions sterling. The total cost of collection of all this money amounted to 1,906,000*l.*, or 3.53 per cent. of the whole.

In the great total the item obtained from patent medicines is very fractional, but it still creeps upward. The year's revenue from patent-medicine stamps was 10,900*l.* better than in the preceding year; it amounted to 202,375*l.* This is double the sum realised fifteen years ago. The number of licensed dealers in patent medicines is also on the increase. These numbered 20,720 in England (20,072 the preceding year), and 1,565 in Scotland (1,528 the previous year). There can be no doubt that this interesting branch of the revenue has been much more closely looked after by the authorities within the past ten or twenty years, and it would not be correct to assume that the duplication of the revenue for stamps means twice as much trade in the class of goods included in the term "patent medicines." But it is equally beyond question that that business does steadily expand. The last return may be taken to indicate a gross business at makers' prices of at least a million pounds a year.

The employment of methylated spirits in the arts and manufactures is increasing, we are told, year by year. The quantity of spirit received into warehouses for methylation was as follows:—England, 1888, 2,304,306 gallons; 1889, 2,430,983 gallons. Scotland, 1888, 461,054 gallons; 1889, 500,840 gallons. Ireland, 1888, 2,132 gallons; 1889, 29,081 gallons. The total quantity taken for methylation last year was 2,960,904 gallons, or 193,412 gallons more than in the preceding year. The number of licensed methylated-spirit makers was 16 in England, 2 in Scotland, and 1 in Ireland; of licensed methylated-spirit retailers, 8,139 in England, 826 in Scotland, and 273 in Ireland.

Coffee-mixture labels, which yielded 6,344*l.* in 1882-3, when they were first introduced, have been used in decreasing quantity every subsequent year. Last year the total yield was 2,686*l.* 17*s.* 9*d.* The continued reduction in the revenue arising from these labels results, in the opinion of the department, from the unpopularity of coffee mixtures and substitutes for coffee.

Railway passenger duty yielded 311,651*l.*, against 315,006*l.* the previous year. The decrease is probably due to the continued tendency of the public to travel by the cheapest class, the fares of which are generally exempt from duty.

The number of joint-stock companies registered in the year was 2,590; in the preceding year the number was 2,177.

Licences to use stills were issued to 747 chemists in England, to 132 in Scotland, and to 27 in Ireland.

The most interesting paragraph in the supplementary report by the Principal of the Laboratory is the reference to "the additional facilities recently afforded to wholesale chemists for the exportation on drawback of the spirit duty of medicinal tinctures of British make. The new regulations seem to be highly appreciated by the trade, for although they were only in existence about four months of the year, no less than 662 samples were examined; and there is every reason to believe that the action taken by the Board will result in the development of this useful branch of British trade."

References to the Somerset House Laboratory under the Sale of Food and Drugs Act numbered 54. In 39 of these cases the officers of the Government laboratory maintained the opinions of the local analysts, but found that in the other 15 the evidence was insufficient to support the allegations made. This indicates that there still exists a far too large proportion of incompetence or rashness on the part of the public analysts of the country. Milk, butter, lard, spirits, and pepper were the substances referred. The only notable discrepancy occurs in regard to butter. Out of nine samples alleged to contain an admixture of foreign fat the Somerset

House chemists declared the charge justified in only two instances!

The total number of analyses made in the laboratory during the year reached the astounding total of 44,996, or 5,700 more than in the previous year. Most of this work is done in connection with the revenue departments, tobacco, beer, wines and spirits furnishing the bulk. A large number of samples of lemon juice are examined for the Board of Trade, and miscellaneous analyses are also performed for the Admiralty, India Office, Home Office, and Post Office. Not much of exceptional interest is recorded this year. For the India Office zinc white, red lead, and lemon chrome have been found to contain 15.7, 16.8, and 26.3 per cent. respectively of heavy spar or sulphate of barium; litharge, 19.0 per cent. of various impurities; and chloride of tin, 64.0 per cent. of sulphate of magnesia. A sample of eosin, intended for red ink, was not only reported as unfit for the purpose, owing to the fugitiveness of its colour, but also as adulterated with 28.5 per cent. of peroxide of iron; while a sample of essence of beef was of so inferior a character as to contain 95.6 per cent. of water, or only 4.4 per cent. of solid matter. In examining the tobacco factories one manufacturer was detected using a solution of liquorice, a second using an excess of alkaline salts in snuff, and a third cutting up brown paper with tobacco for cigarettes. Among the parcels imported were several samples of tobacco and cigarettes which contained coca leaves (*Erythroxylon coca*). The importer of this coca-tobacco appeared to have been ignorant of the fact that the law does not permit the sale under any conditions whatever, of tobacco when mixed with the leaves of any other plant. Under these circumstances the Board of Customs allowed the seized tobacco and cigarettes to be sent back to the port of shipment, the duty being repaid. Out of 191 samples of herb and ginger beer examined 55 were found to contain more than the legally permitted 3 per cent. of proof spirit, the proportion ranging to 9.7 per cent.

RAILWAY RATES AND TRADERS.

THE officials of the Board of Trade are beginning to realise that the task set them by the Railway and Canal Traffic Act of 1888 is one too great even for their administrative powers. Their invitation to the trading classes for criticisms of the classification scheme proposed by the railway companies has been so magnificently responded to that they are evidently bewildered. By June 3, the last date fixed for receiving objections, no less than 1,500 were in their hands, and it is probable that among all these scarcely a single proposal of the companies suggestive of advanced rates is left unattacked. Already the representatives of the companies have conferred with representatives of some of the great trades, and, so far as is known, with varying results. But in the main the discussions have ended in no definite results. The Board of Trade has postponed reference to itself for a still further period, hoping that meanwhile more conferences will remove, or at least reduce, some of the difficulties in the way of adjustment. What is becoming more and more clear, however, as time goes on is that nobody is likely to be much benefited or much injured by the operation of the Act from which so much was anticipated and so much feared. The railway companies say, with incontrovertible force, that they have been ordered to publish a new classification, and that in preparing it they must allow themselves a wide margin to cover the varying requirements of wholesale and retail trade, the different styles of packing, and possibly developing expenses. They declare that under present circumstances they have no intention of generally

raising their rates; but they point out that the cost of coals may quite likely increase, and also that it is not improbable that they may be called upon to pay at a higher rate for labour involved. On the other side the trader asks what is the good of a classification which does not define within a hundred per cent. what he is to pay, and leaves him as before practically at the mercy of the railway managers, modified only by their own interests and by competition. They are beginning to see, too, that a wearisome struggle to get a certain kind of goods brought from one class to a lower one is hardly worth the effort when it is remembered that the companies will certainly be allowed to retain the power of turning the screw towards the reserved maximum. On one point, and that is an important one, namely, the rate for the carriage of empties, it is understood the companies are inclined to withdraw from the position they had taken of making higher charges; and it is likely that they will make concessions in regard to the classification of certain heavy goods, respecting which great pressure is brought to bear upon them. But to the extent that they do this, it will be all the worse for the smaller and less influential traders. The companies are between the devil and the deep sea. If they please their customers they will be certainly roasted by their shareholders. Their goods traffic brings them in a total revenue of some forty millions per annum, and this amount has to be screwed out of somebody. The Act requires that the Board of Trade is to settle ultimately what is to be the "just and reasonable" mean between the railway companies' demands and the traders' objections. This, with an elastic system of maximum rates, which the companies must have in reserve, but which they do not intend to impose, is a result which cannot be attained. It is beginning to appear that the Act as drafted is not what was wanted; that a fixed wooden measure to apply to the ever changing requirements of modern business is not practicable, and that what will really have to be done is to extend in some fashion the powers and discretion of the Railway Commissioners, and to provide greater facilities than now exist of appeals to their judgment.

THE CONFERENCE.

THE prospects of a good meeting of pharmacists at Newcastle are bright. The local attractions are good, and the preliminary list of subjects which we have published shows that the papers which will be read are likely to create good and useful discussions. This is one of the best objects of the Conference, and we are inclined to think that the man who leads off a general debate, although he contributes little to our stock of knowledge, does far more good to the organisation than the one who communicates a learned dissertation. It will have been noticed that the subjects are principally related to pure pharmacy, and that few are purely chemical. It has been our custom for some years to note in anticipation the chief facts which past experience of the subjects furnishes, and continuing this custom we take the Newcastle subjects in the order in which they appear

Papain. in the list. In the first we are to have the action of papain as a digestive agent compared with commercial pepsin. This has been done before, and the result was unfavourable to papain. Yet the vegetable ferment is unquestionably a valuable agent in the hands of the physician. Indeed clinical and physiological experiments seem to show that there is no comparison between it and pepsin. Papain, according to one authority, is not a true peptoniser like pepsin, and that would indicate that as a digestive agent it is inferior, yet as a topical application to the diphtheritic membrane, and in certain affections of the

skin, it has an influence which pepsin does not exert. Nevertheless the ferment holds an uncertain position, and Mr Ball will probably relieve it of that. Is it possible on the

Infusion of Gentian.

next subject, "Infusion of Gentian," to discuss generally the question of infusions? There is still in pharmacy a very honest regard for the superiority of the freshly-prepared vehicles, which are, when made, beautiful and satisfactory products. But the trouble with them is that as soon as they are cold they begin to change, and in the course of a day or two are positively nasty. Infusion of gentian is about the worst in this respect. Dispensers suffer little in consequence of this, but patients do. Concentrated preparations are now universally used, and give satisfaction to prescribers, dispensers, and patients. The time has arrived for an official move in this direction. The Pharmacopœia reduction of the length of time for infusing is not a success, for it meets the dispenser's objection to fresh infusions and not the patient's. Mr. W. Johnston, who is to communicate the paper on that

Tinctura Limonis.

subject, is also to speak on tincture of lemon peel. Many will wonder what can be said about this. One notable point is the fact that it is made with proof spirit, which cannot be the best solvent for the essential oil, while it dissolves extractive matter which is not required. The tincture is weak; a much better one for flavouring purposes is made by macerating double the quantity of the fresh peel in rectified spirit. The tincture is excellent for syrups, and it would be distinctly advantageous if the formula were made uniform with that for tincture of fresh orange peel. Mr. C. A. Macpherson, in one of his papers, is

Official 1-per-cent. Liquors.

to recur to a subject which he has previously discussed with considerable force, viz., the formulæ for the official 1-per-cent. liquors. The Pharmacopœia authorities pooh-poo the criticisms of the formulæ, although they have emanated from all classes of pharmacists. There is now a good opportunity of having finality on the subject, and there are three main issues to be considered: (1) Should the solutions be made on the minim or fluid-grain basis? (2) Should this be exactly 1 in 100 or 1 in from 99 to 103? and (3) Should the relative parts and definite weights not produce identical liquors? Mr. Macpherson is also to communicate a paper on "Liquor Morphine Bimeconatis." This in a certain sense is an anomalous solution. We need not refer to the fact that it is a poor and inadequate imitation of Squire's solution of bimeconate of morphia, which is understood to be a preparation of opium. The official solution is not a centesimal one; herein it is anomalous, because so much was made of the centesimal principle that it was a pity to violate it with

Meconic Acid.

the first newly introduced thing. Though nearly allied chemically, the first paper by Mr. A. H. Allen should in other respects be widely different from the last one. Recently Mr. Allen has had to give evidence in his capacity as a public analyst in cases of alleged criminal poisoning. In one of these laudanum was supposed to be the agent used; and although the body had been buried for nine months he succeeded in proving the presence of meconic acid in it, showing by inference the existence of opium. We presume that the test which Mr. Allen used was with ferric chloride, a salt which reacts with meconic acid as no other substance does. Yet at one great trial in recent years, viz., that of the Frenchman, Chantrell, who poisoned his wife in Edinburgh with opium, the scientific evidence against and in support of the value of the test was equally divided, and had it not been for other evidence the man would most likely have escaped the scaffold. Mr. Allen has had an unusual experience in the

case referred to, and while he gives the benefit of that he gives the members of the Conference the opportunity of debating a very interesting subject. His next one is no less important, it being a note on "Strychnine

Strychnine Vermin-killers. This also is based on a toxicological investigation, and, presumably, the paper will contain the writer's observations

therein. Apart from that pharmacists require some information on the best way of making strychnine vermin-killers. There is an art in it. For instance, if we take an amount of strychnine equivalent to the proportion in Battle's vermin-killer, and mix with diluents and ultramarine, the resulting powder does not appear to be so toxic as Battle's. Can the Conference say why? Two papers are to be communicated

Standardised Ipecacuanha Preparations. on preparations of ipecacuanha, one being on the B.P. wine, and the other on standardised fluid extract and wine. It is impossible in brief space to summarise what has been said regarding the new way of making ipecacuanha wine; it will suffice to state that the reporter

on the Pharmacopœia has taken advantage of the criticism to the extent of recommending certain modifications in the process. We do not think that these will meet the case, and as the Conference gives a good opportunity, we repeat our summary of the modifications:—

(1) It is proposed to macerate the coarsely-powdered root in 1 oz. of acetic acid for twenty-four hours, then percolate with 5 oz. of water. Set this percolate aside, then continue the percolation with 10 oz. of water. The percolates are then to be evaporated separately to a low bulk, and, after mixing at this stage, evaporation continued to dryness.

(2) It is proposed to powder the dry extract, and rub "gradually and thoroughly with sherry in a mortar, and afterwards macerate for forty-eight hours." This is to ensure ready exhaustion by the wine.

From this point it will be natural for the discussion to diverge to the fluid extract of ipecacuanha, a preparation which can be readily standardised, and which should be the basis of the wine. We are pleased to see that

Mr. Proctor's Papers. the local element in the Conference programme is strong. In addition to the four papers mentioned last week another is promised by Mr. J. Pattinson, of Newcastle. Mr. Proctor's papers are all of a practical character, and two of them may be said to be related, as the presence of sulphate in ferri et ammonii citras is the result of imperfect washing of the ferric hydroxide precipitate. It is difficult to know when the washing of such precipitates is complete, and the object of Mr. Proctor's first paper is to reduce the difficulty.

In our next issue we shall comment on the other subjects, and meanwhile, through the courtesy of Mr. W. A. H. Naylor, the honorary secretary, we are able to state that papers on the following subjects will also be presented to the Conference:—

"Strophanthus Plants," by T. Christy, F.L.S.

"Wild Cherry Bark and Preparations," by L. W. Hawkins.

"The Effect of using Nitrous Vitriol in the Manufacture of certain Aërated Waters," by J. Pattinson, F.I.C., F.C.S.

"Negative Evidence of Lead in Drinking Water," by R. Reynolds, F.I.C., F.C.S.

"Hypophosphorous Acid as a Solvent of Strychnine and Morphine," by H. W. Jones, F.C.S.

"Extracts of Stramonium," by A. W. Gerrard, F.C.S.

THE REFORMATION OF MEDICAL CHARITIES.

We are glad to see that the British Medical Association has resolved to make some serious efforts in the direction of

controlling and regulating the supply of medical charity. This movement has been ably advocated by Dr. Rentoul, of Liverpool, and the facts are so striking and so important that it is quite probable that when once they come to be considered generally, a great reform in hospital management will be brought about with unexpected rapidity. During the next six months the branches of the Association are to consider the question, and their discussions should result in a consensus of opinion which can be moulded into some definite action. The Charity Organisation Society is also taking steps to obtain, if possible, a Government inquiry into the management of metropolitan medical charities, and the dentists in council at Brighton last week, we believe, also supported the agitation. There are, says Dr. Rentoul, 759 medical charities in England which treat 2,828,296 paupers in twelve months. There are others besides, but these are all of which he can give statistics. Then the poor law guardians treated 831,353 in and out-door paupers during 1888, all these cases having free medical treatment. Further than that, the various fever hospitals in the towns and cities treated many sufferers free. The Metropolitan Asylums Board alone attended 6,537 persons in one year. Again, he calculates that each doctor in England gives free private medical aid to about twenty persons every year. Adding all his figures together, and taking the population of England at 28,000,000, he finds that one in every six and a half of our population asserts practically that he or she is unable to pay for medical aid. Of actual legally recognised paupers we have a proportion in this country of 1 to 34 of the whole population, but the present facilities of medical relief have encouraged the extension of free relief to five times the number of those who may be said to have a legitimate claim to it. Of course the hospital and medical charity system is expressly and rightly intended for the benefit of persons who are not paupers in the legal sense of the term, and no one would wish to limit the advantages of these great institutions to the absolutely helpless. It is right that when sickness or accident overtakes the worker the community should provide for him at least personal aid; his family will have enough to do to maintain themselves in his absence. But for the sake of these justified recipients of this relief it is right too that the privilege should not be given promiscuously, as in most cases it is given now. People who can properly afford to pay for medical aid and medicine, but who yet take these from a public charity, directly injure the truly poor, and at the same time degrade themselves. What we understand Dr. Rentoul to ask is that the administration of medical charity shall be more carefully supervised, and that at the same time a system of moderate and fair payment shall be devised, so as to reduce the risk of pauperising honest workmen, who would rather pay for what they get if they could be sure of the best treatment at a not impossible tariff. In a word, Dr. Rentoul and his friends do not wish to restrain charity, but to guide it into a proper channel.

Chemists and druggists have a direct and an important concern in this matter. They, no less than the doctors, are robbed when medicine is given away which ought to be paid for; and Dr. Rentoul has, through our columns, invited the co-operation and the advice of the pharmaceutical body. The industrial population of this country is 8,649,259 men and women, between the ages of fifteen and sixty-five. Out of a population of 36,000,000, 30,000,000 are in receipt of incomes under 3*l.* a week. There is a total of 26,438,000 weeks' sickness in that population, 13,269,000 persons being ill at some time during the year—an average of fourteen days' sickness being allowed to each. No practical man would hold that the working classes can pay fees of 3*s.* 6*d.* to 5*s.*

especially when illness is prolonged. Therefore what is required is that some provision shall be made whereby medical men and chemists can meet the wants of this vast population fairly and honestly, without pauperising them either in one sense or the other.

AN ANCIENT SPIRIT.

IN the days of Raymond Lully—and that was in the thirteenth century—medicine men had learnt the value of the spirit distilled from a mixture of nitre, alcohol, and an acid. On the threshold of the twentieth century that spirit has a place in all the Pharmacopœias of the world, and with the Anglo-Saxon race is one of the most popular household remedies. At divers times during the present century sweet spirit of nitre, in its various forms, has been attacked by chemists, pharmacists, and physicians; and, had all their wisdom been listened to, it would long ere now have been improved off the face of the earth, and its literature would have been a sealed book. What the loss to mankind would have been we dread to calculate. Probably the world would not have been less populated than it is now, for the spirit is not one of those things upon which life depends; it is not a strong remedy, nor do we attempt to avert fatal issues with it. It so often goes along with ipecacuanha that we might reasonably suppose that that association was the origin of the periodically recurring literary avalanches which we experience. Ipecacuanha has been making headway lately, and we notice that we are to have more about it; but even with the forthcoming Conference papers we question if it will not be a little way behind, for the last issue of *Ephemeris* contains a paper on spirit of nitrous ether by Dr. E. R. Squibb, which carries the literature of the spirit ahead to the extent of a number and a half of THE CHEMIST AND DRUGGIST. We cannot reasonably reproduce this paper, for, as the author says, "the casual reader might pass it over, perhaps, without much loss," but it is possible to cull from it a few practical hints which even the casual reader cannot afford to neglect. Dr. Squibb first wrote on the subject in 1856, the paper being based on a few years' practical experience with the U.S.P. (1850) process for making the spirit. This was by distilling a mixture of nitre, sulphuric acid, and alcohol, the distillate being afterwards washed with potassium carbonate and re-distilled. The process was ridiculous, and Dr. Squibb suggested that the nitre and sulphuric acid should give way to nitric acid alone. This course was adopted. We need not follow the author in his criticism of the changes which the American spirit has suffered since. Suffice it to say that the process of 1880 consists in distilling an ethereal liquid from a mixture of nitric and sulphuric acids and alcohol, washing the distillate with ice-cold water, and dissolving the ethereal liquid in nineteen times its weight of alcohol. This washing process is now peculiar to the United States Pharmacopœia, but something like it was formerly recognised by the Edinburgh Pharmacopœia. Its object is to start with a definite product, and Dr. Squibb says that it "is a very useful and important step, because it renders the washed ethers fairly uniform in character and quality before dilution with a prescribed proportion of alcohol."

We are not aware of any reliable facts which show that this washing improves the medicinal quality of the spirit. When there were no ready means of testing the amount of nitrous ether in it, it was reasonable to separate the ethereal liquid and make an alcoholic solution of it; but there is no longer any necessity for that. Now we can tell in a few minutes the percentage of nitrous ether. Before washing

the ethereal liquid is an exceedingly complex mixture; after washing it is little less so, and much of the active ingredient is taken out. So also is most of the alcohol which it contains. These are disadvantages to the process, and in no way advance the principle of exact therapeutics, while it defeats one of the main objects which Dr. Squibb has in view, viz., that retail pharmacists should make their own sweet spirit of nitre. We have much sympathy with this object, but we maintain that when a process entails "loss" it is not profitable on the small scale, because the retailer has neither the means nor the time for recovering the "lost" products, whereas the large manufacturer can distil his wash-waters, and get the alcohol from them. This objection does not apply to the British Pharmacopœia process. Dr. Squibb, it is true, has after experiment come to the conclusion that "the difference in favour of the simple distillation of nitric acid and alcohol [over the B.P. method] is so great as to be far outside of the limit of probable error, either in the management of the processes or the conversion of the confused systems of weights and measures." Here the doctor neither does himself nor his subject justice. Where is the confusion in the weights and measures? The fluid ounce and the solid ounce of the formula are perfectly relative, and with American ounces the product would be the same. Again, he used stronger alcohol than the Pharmacopœia directs. Strange that one of the greatest living authorities on alcohol could not dilute an alcohol of .8148 s.g. to .838 in order to be exact! The experiment brought out several interesting facts, however. First, the action in the retort was much more violent than it is with the weaker spirit, and began below the prescribed temperature; second, the specific gravity of the spirit was .8278; and, finally, it contained 5.4 per cent. of nitrous ether, as compared with the maximum of 3.15 per cent. which the Pharmacopœia requires. As a rule, a higher percentage is obtained with rectified spirit, but the difference observed by Dr. Squibb is greater than the difference in the alcohol would lead us to expect. Here there is a distinct economical advantage, and it is worth consideration whether the modification could be carried into practice or not.

There is much in the paper regarding the keeping of the spirit. It is well known, or ought to be, that it should be stored in small hottles; otherwise, by exposure to the air, the nitrous ether evaporates and undergoes oxidation. We need not quote figures to prove the assertion, for it has been demonstrated *ad nauseam* that the shop round and the winchester are the worst enemies of sweet spirit of nitre. Keep it in as small and as full hottles as possible in a cool place, and in the course of a month the contents of the bottle in use do not deteriorate beyond a half per cent. of the nitrous ether. The greatest difficulty from the physician's point of view is how to keep the remedy pure in the patients' hands. As soon as it is mixed with water rapid decomposition ensues. Occasionally it is prescribed undiluted, to be given in 30 minims to a teaspoonful added to half a wineglassful of water at the time of taking. But much more frequently it is ordered in mixtures of which water is the base, and before it leaves the hands of the pharmacist it will have lost about 34 per cent. of its nitrous ether. Can this very great loss be prevented? The late Mr. John Williams proposed as a preservative of ethyl nitrite a solution of one part glycerin and two parts absolute alcohol, and taking his idea, Dr. Squibb applied it to the preservation of spirit of nitrous ether during the few days when it was diluted for use, and found it to be fairly successful. Thus prescriptions made up from a good 5 per cent. spirit with about 25 per cent. of glycerine might be effectively used for forty-eight hours. Numerous experi-

ments with glycerine and water in different proportions as a vehicle for solution of pure ethyl nitrite and for spirit of nitrous ether led to a trial of simple syrup for the same purpose, and this proved to be better than glycerine. For example, a mixture of water, glycerine, and the spirit diminished from 4.2 per cent. to 1.31 per cent. of nitrous ether in 120 hours, while with syrup the ether did not fall below 2.5 per cent. in the same period. Last winter it was expected that all our troubles with sweet spirit of nitre would come to an end by the use of a solution of pure ethyl nitrite. We pointed out at the time that such a solution brought exactly the same trouble with it, and that if we were to bestow as much care on the old spirit as on the new compound we should serve medicine equally well. Dr. Squibb is of a similar opinion. He says "a solution of ethyl nitrite keeps no better than well-made spirit of nitrous ether when both are made from alcohol of the same strength; whilst when in actual use, and diluted with water, the decomposition is scarcely less rapid, and leaves a residue much poorer in ethereal products."

Castles in Spain. A Mr. H. A. Pickerden, of 32 Brailsford Road, Brixton, is sending round to the wholesale drug trade, and perhaps to some retailers as well, an eloquent description of a lovely piece of property "within two and a half hours' ride of London;" "approached by a private carriage drive;" "a charming prospect for the eye to rest upon;" "within two minutes' walk of the sea, and close to the parish church." "Price, 5,000*l*." The unsophisticated wholesale druggist reads this description with interest, sighs as he thinks of that parish church and the other attractions, thinks he will buy such a place when quinine goes up again, but wonders why on earth the property is offered to him. Then he turns to an accompanying circular and finds that Mr. Pickerden proposes to buy this charming property as "alms houses for aged unsuccessful chemists, and convalescent home for chemists' assistants." He hopes "to secure the whole of the purchase money (or, at least, the greater portion) from the wholesale houses supplying chemists." He thinks the retailers will cheerfully make up any little balance. Then he artfully suggests that the ten houses already existing on the estate shall be named after the ten largest contributors, who will thus get a permanent advertisement in return for their liberality. Mr. Pickerden's name does not appear on the register of chemists and druggists, and we have not the least idea who he is; but we hope, for the sake of our common humanity, he will not turn out to be an agent for the owner of the property or of the auctioneer.

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New Test for Cocaine. In a letter written last December to Dr. Squibb, of New York, Dr. Ralph Stockman stated that "When pure cocaine is heated with strong hydrochloric acid in a sealed glass tube in the water-bath, it splits up into its components without any change of colour, except a very light yellow tint. When isatropylcocaine is so treated it splits up into ecgonine and a brown oily-looking body, which is decomposed isatropic acid. With long boiling a black body is deposited." Upon trying this reaction Dr. Squibb found that the sealed tube and water-bath were not essential, and that the process might be very useful as a test for the purity of cocaine. He accordingly directs .5 gramme of the powder and 2 c.c. of strong hydrochloric acid to be put into a small test-tube and carefully warmed over a gas-flame until the decomposition is complete, as indicated by the end of the effervescence and the commencement of boiling. Perfectly pure cocaine, or hydrochlorate of cocaine, when thus treated yields an almost colourless solution, and the depth of colour indicates the amount of impurity. The best crude cocaine yet met with gives a colour of the depth of ordinary brandy, but a large proportion of the parcels give solutions many shades darker, and some of the earlier and worst specimens give black solutions. Good hydrochlorate of cocaine tested in this way gives a nearly colourless solution, or, at most, a pale wine tint. On standing for a few hours these solutions give fine groups of crystals.

Crude Cocaine. In the current number of *Ephemeris* it is stated that it is highly probable that the importation of coca leaves into the States

and Europe for the manufacture of cocaine is nearly at an end. For more than a year past crude cocaine has been sent from Peru to the States and Europe in rapidly increasing quantities, and of better and better quality, than in 1885, when it was first made. During 1888 the quantities exported from Peru became very large, and the quality reached 90 to 96 per cent., and occasionally even 98 per cent. There are now at least four manufacturers in Peru. The two largest are Germans (C. M. Schroeder & Co., and J. Meyer), and the chief market for their products is Hamburg; and, curiously enough, their products can be had better, cheaper, and in a shorter time from Hamburg than from Peru. Besides this, there is a combination of the makers now to keep up the price and to confine the sales to Hamburg. Some idea of the very large quantities produced may be had from the circumstance that one maker has a single contract with a European house for 70 kilogrammes, or about 154 lbs. per month. Another curious circumstance connected with this young industry is that one of the largest and most successful makers is by trade, and was by occupation, a bricklayer when Dr. Squibb's processes were published, and simply took them up as a better and more promising trade for making money. The advantages of exporting the crude alkaloid rather than the coca leaves are many and important. As cocaine is transported in the treasure-chests of the steamers the difference in freight is about as $\frac{1}{2}$ lb. to 100 lbs. of the leaves. But a much more important economy is shown by a comparison of the yield of alkaloid, by the same process from the same leaves, as worked here and in Peru, the yield there being 13 to 15 per cent. greater. This is owing to the fact that the leaves in transport undergo deterioration. Crude cocaine comes either in granular powder or in fragments of press cake of all sizes and forms up to an inch or two in superficial area, and from a quarter of an inch to an inch in thickness. The general colour is a dull, creamy white, but is rarely quite uniform throughout any package, varying from a dirty or brownish white to very nearly white. But in this matter of colour it is constantly improving. The fragments vary more in consistence than in colour. A large proportion are hard, compact, and slightly horny when cut or scraped, while others are softer, more porous and chalk-like, and easily cut or scraped, the general density being lighter than the softest, lightest chalk. In Hamburg crude cocaine is nearly all sold upon the assay of Dr. Gilbert, and Dr. Squibb finds that his own results have generally been in fair accord with those of Dr. Gilbert, and the New York Custom House has generally accepted the former in adjusting the duty.

* *

The Maybrick Case. With the commutation of the capital sentence on Mrs. Maybrick to penal servitude for life, the agitation on her behalf has practically come to an end. Still, however, a few enthusiasts keep it up. The editor of *Truth* writes:—"I have received from Dr. Forbes Winslow a letter and a newspaper extract, for the purpose, apparently, of showing me that the decision of the Home Secretary in the Maybrick case was arrived at solely with reference to the views of Dr. Forbes Winslow. I really cannot, however, undertake to insert a communication of this nature gratuitously. Some of my contemporaries are more indulgent, and I recommend Dr. Winslow to try them, or, failing them, the manager of my advertising department." We presume that "the views" which Dr. Winslow has submitted to *Truth* are those which he first paraded at the meeting in Cannon Street Hotel, and later in the *Times*. It is a curious fact in connection therewith that "the views" are those which were advanced in this journal a few days before Dr. Winslow discovered them, and to which extended publicity was given by the daily press, full credit for them being given to THE CHEMIST AND DRUGGIST.

THERE is a good account of the fluted scale-insect (*Icerya purchasi*, Maskell) in the August number of the *Kew Bulletin*. This is one of the most destructive pests injurious to plants. Of late years it has made its appearance in South Africa, New Zealand, and California.

Scientific Notes:

On Chemistry, Pharmacy, Botany, Materia Medica, &c., Original, Selected, and Translated.

PURIFICATION OF NAPHTHALENE.

It has recently been found that by treating boiling naphthalene with $\frac{1}{2}$ to 2 per cent. of its weight of sulphur, the impurities are decomposed, sulphuretted hydrogen being evolved, and bodies of high boiling-point being formed; from these the naphthalene can easily be separated by distillation. The sulphuretted hydrogen may be absorbed by soda or milk of lime. This is considered a great improvement on the old sulphuric-acid method.

SPECIFIC GRAVITY OF PARAFFIN WAXES.

MR. ILTYD I. REDWOOD gives in a recent issue of the *Journal of the Society of Chemical Industry* a tabulated statement of the results obtained by the examination of American paraffin waxes at different temperatures, a litre of each sample being weighed, and the figures obtained show that the variations in specific gravity are not quite regular, and that the rise from 135° to 140° affects the 108°, 120 $\frac{1}{2}$ °, and 122 $\frac{3}{4}$ ° waxes much more than any of the other alterations in temperature; while the greatest alteration in the case of the 114° and 122 $\frac{1}{4}$ ° waxes is between the temperatures 125° and 130°, and 145° and 150° respectively.

TEST FOR SENEGA.

L. REUTER, of Heidelberg (*Archiv. der Pharmacie*), offers the following test for the chemical identification of senega root, which is based upon its quite constant constituency of methyl salicylate:—5 grammes of dried and powdered senega are macerated for fifteen minutes with 50 c.c. of water, temperature about 60° C., filtered, the filtrate acidified with 3 drops official hydrochloric acid, and agitated with 50 c.c. of ether; the ethereal layer is decanted, and the ether allowed to dissipate spontaneously. There should be sufficient residue so that when treated with 20 c.c. of water at 60° C. and the solution with 1 drop of ferric chloride solution, a distinct violet colour should be developed.

MANUFACTURE OF IODOFORM.

SUILLIOT and RAYNAUD advocate a process based on the reaction between acetone and iodine, and by the use of hydrochlorite at a later stage practically recover the whole of the iodine in the final product. The mode of procedure is to dissolve 50 parts of potassium iodide, 6 parts of acetone, and 2 parts of sodium hydrate in 1 or 2 litres of cold water. On adding to this a dilute solution of sodium hypochlorite, drop by drop, with agitation, a precipitation of iodoform ensues. The hypochlorite is added until all acetone or iodide has disappeared. The results are close on the calculated quantities. As the presence of neutral salts of the alkalis does not interfere with the reaction, crude caustic liquors may be used, if previously freed from sulphides, sulphites, &c. The liquor decanted from the precipitate contains only traces of iodine.

SALICYLIC ACID IN CERTAIN LILIACEÆ GENERA.

DR. A. B. GRIFFITHS, in a paper recently communicated to the Chemical Society, states that he has isolated salicylic acid from the leaves, stems, &c., of *Tulipa*, *Yucca*, and *Hyacinthus*. The acid was separated by digesting the parts, cut up into small pieces, with ether, and distilling. The residue was treated with distilled water, the filtered solution neutralised with potassium carbonate, evaporated, and finally distilled with pure hydrochloric acid. The aqueous distillate yielded on evaporation colourless, prismatic crystals, which gave all the reactions for salicylic acid. The percentage of the acid in various parts of the plants was as follows:—

	<i>Tulipa</i>	<i>Yucca</i>	<i>Hyacinthus</i>
Leaves ..	0.0989	0.1410	0.1103
Peduncles ..	0.0812	—	0.0738
Stems ..	—	0.1065	—
Bulbs ..	0.0542	—	0.0483
Flowers ..	trace	—	trace

BICARBONATE OF SODA IN MILK.

M. L. PADÉ, in a communication to the Academy of Sciences, shows that during his researches into the causes of the disappearance of the greater part of the alkaline element in the soluble ash of milk, to which bicarbonate of soda has been added, he discovered an exact method of effecting the analysis of this salt. During combustion about two-thirds of the bicarbonate are transformed to phosphate of soda and carbonate of calcium by reacting on phosphate of calcium contained in the milk. According to this transformation the phosphate of soda is contained in the ash of a milk to which the carbonate of soda has been added. But the soluble ash of a pure milk being but slightly alkaline, and containing only traces of phosphoric acid, in order to ascertain exactly the quantity of bicarbonate of soda that has been added, all that is needed is to take the alkalinity of the ash and analyse the phosphoric acid contained in it.

NORTH AMERICAN RHAMNACEÆ.

THIS highly medicinal order, whose properties have as yet only begun to be investigated, is represented in North America by twelve genera and fifty-eight species, according to Professor Wm. Trelease, who states that there are seven species of *Rhamnus*, recognising a variety of *Rhamnus crocea*, Nutt., and two varieties of *R. Californica*, Esch. Regarding the interesting but troublesome relationship between the latter species and *R. Purshiana*, D. C., he says:—"In the broad-leaved form, distributed and described by Howell as *R. occidentalis* from Oregon (list of 1887, number 1,105), this species appears to range farther northward than usual, and to approach the preceding (*R. Purshiana*). Indeed, some herbarium specimens are hard to place." He again comments on the great variability of *R. Californica* in expressing the opinion that Professor Greene's *R. rubra* is but a variety thereof. It is to be regretted that something more was not said concerning these difficult forms, which possess so much practical interest to pharmacists. In this connection the *Druggists' Bulletin* announces that the botanical editor of that journal is collecting material for a study of the Pacific Coast species of *Rhamnus*.

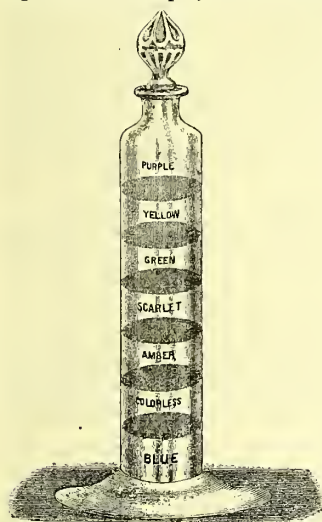
TESTING PANCREATIN.

ON this subject Mr. E. G. Eberhardt (Indianapolis) recently contributed some useful notes to the Indiana Pharmaceutical Association. Pancreatin, he said, contains three principal bodies—trypsin, a peptonising ferment; amylpsin, a starch-converting ferment; and steapsin, an "emulsifying" ferment. These act only in alkaline solution, and the food pulp on entering the duodenum is rendered alkaline by the joint action of the bile and pancreatic secretion. To properly value a pancreatin requires a series of tests. Its proteolytic activity is determined by allowing it to act upon milk until nitric acid no longer produces a precipitate. The National Formulary requires 5 grains to peptonise 1 pint of milk in thirty minutes. Milk thus peptonised assumes a yellowish colour, becomes more limpid, and develops a bitter taste. This is the case, but the author has never, even with the best sample under observation, been able to reach a point where the milk no longer precipitates with nitric acid. The end of the reaction seems to be reached when diluted nitric acid produces only a finely granular precipitate that does not separate as a curd. The starch test is made by allowing it to act upon starch-paste. The liquefaction is apparent to the eye, and the result can be checked by the reducing effect of the product upon alkaline copper solution. Iodine has been recommended as an indicator, but is not reliable, as it seems in some manner to be used up itself, the blue colour fading more or less rapidly, until a point is reached where the colour seems to be permanent. The emulsifying test, made by agitating together definitive volumes of pancreatic solution and some fixed oil, is utterly worthless, as it is made under conditions differing so radically from those existing in the body. Mr. Eberhardt has never produced a permanent emulsion, and as the result of his inquiry he has found commercial pancreatin to differ greatly. It also differs with the source, herbivorous animals yielding a product rich in amylpsin, carnivora one rich in trypsin, and omnivora would occupy an intermediate position. For this reason pancreatin of the hog is preferred.

Practical Notes and Formulae.

A VARIEGATED SHOW-BOTTLE.

THE *Druggists' Bulletin* gives the following directions for making a bottle which is exceedingly attractive for window or counter exhibition, and which serves to illustrate to the ordinary observer how perfectly the pharmacist controls the elements with which he has to deal. Ascertain the capacity of the bottle and divide by seven, to find the volume of each liquid to be employed. The fluids should, in the order



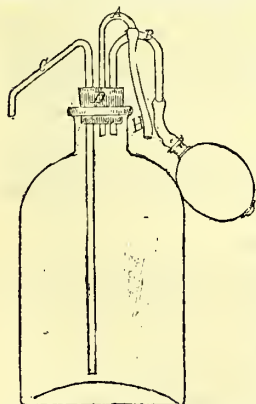
named, be carefully poured down the side of the bottle, held in slightly inclined position, or through a thistle funnel.

(1) One volume of sulphuric acid, tinted blue with indigo sulphate; (2) 1 volume of chloroform; (3) 1 volume of glycerine, slightly tinted with caramel; (4) 1 volume of castor oil, coloured with alkanet root; (5) 1 volume proof spirit, slightly tinted with green anilin; (6) 1 volume of cod-liver oil, containing 1 per cent. of oil of turpentine; (7) 1 volume of rectified spirit, slightly tinted with violet aniline. By thus selecting liquids which are held in place by the force of gravity, and alternating with

fluids which are not miscible, the strata will remain clearly defined and will not mingle by diffusion, as is the case when miscible liquids such as glycerine and water are brought in direct contact with each other.

A PUMP FOR BOTTLES AND CARBOYS.

A CORRESPONDENT of the *American Chemical Journal* proposes a modification of an apparatus which has been used in various forms for removing liquids from bottles and carboys. The figure shows the



paratus can be used for many purposes in pharmacy: for example, as an attachment to acid and alkali bottles, and even for liquids which it is not desired to pour off in the ordinary way. It might be used for fresh infusions, and for decanting clear liquids from precipitates.

GINGER WINE.

"A PRACTICAL EXPERT" gives in the *Mineral-Water Trade Review* the following directions for a splendid wine:—Boil, in a perfectly clean copper, 6 gallons of water, 18 lbs. of loaf sugar, the thin rinds of 7 lemons and 2 Seville oranges, $\frac{1}{2}$ lb. of unbleached ginger, bruised, and a $\frac{1}{4}$ lb. of raisins. Boil for an hour, skim carefully, and pour off into a

large vat until the next day. The preparation must not be left in the copper. Strain, add the juice of the lemons and oranges, 1 oz. of isinglass, and 2 tablespoonfuls of thick fresh yeast. Put the ginger wine into a cask, stir it each day until fermentation ceases, which will be in two or three days. Bung it up and leave it for six weeks. Strain it into another cask, and in four weeks it will be ready for bottling. The probable cost of this is estimated at about 1s. 2d. per gallon. The writer adds that the dried rinds of oranges and lemons answer quite as well as the fresh, and then tartaric or citric acid can be added in lieu of the juice. After boiling the syrup slowly, and skimming when any scum arises, a little tannin (about a drachm to 30 gallons), dissolved in a little water, may be added; this coagulates and throws down albuminous matter. Strain again into a tub prepared for the fermentation, and add yeast, about two large tablespoonfuls, or a $\frac{1}{4}$ pint to every 20 lbs. of sugar. Sometimes it is not advisable to add tannin until the fermentation is over, and fining begins. Straining before fermenting is always advisable, and the tub in which the fermentation takes place should be covered. When the fermentation has subsided a solution of isinglass, or the whites of two or three eggs, may be introduced and stirred up, and the whole immediately racked off into another cask, which may be bunged down in the course of an hour or two, and when the wine will draw off bright it is ready for the bottle.

PERCOLATION: A HINT BY J. U. LLOYD.

In many cases the operation of percolation is more thoroughly conducted by a deviation from the established methods. I have found it preferable with some drugs to use water sparingly, in a preliminary step, even if the constituent to be extracted from the drug is altogether resinous. My plan, under these conditions, is to moisten the powder by sprinkling it with a small amount of water, from two to three ounces of water to the pound of drug being an average. This moistened powder is then permitted to remain in a closed container for ten or twelve hours, and is then moistened again with alcohol, packed in the percolator in the usual manner, and extracted by the usual process. Where it is possible, after the water moistening and maceration, I prefer to use such an amount of alcohol to moisten the powder as will bring the combined amounts of alcohol and water in the drug to the strength of the alcohol that is used afterwards to continue the percolation. For example: If a mixture of two parts of water and three parts of alcohol is to be used as the menstruum, I moisten the drug first with two parts of water; next, after the maceration period has passed, with three parts of alcohol, then, after packing the powder in the percolator, I continue the percolation with a mixture of the same strength, water two parts, alcohol three parts. As to the extraction of drugs generally, points to be observed are:—(1) Use, when desirable, enough water to soften the plant integuments before percolation, spraying the water on the powdered drug so as to avoid lumping; (2) allow this water-moistened powder to stand in a closed vessel for a considerable period; and (3) where possible, before packing in the percolator, sprinkle it with enough alcohol to bring the liquids to the composition of the menstruum subsequently employed in percolation.

MAIZE OIL IN PHARMACY.

MAIZE OIL of good quality is now being produced in considerable quantities, and, replying to a question regarding its use in pharmacy, Mr. C. A. Heinisch stated, at the American Pharmaceutical Association, that lin. calcis made with the oil in the same proportions as in U.S.P. cottonseed oil liniment, keeps longer, though after a time separation occurs. Unguentum diachylon made with maize oil is of good consistence (about the same as with olive oil), and retains it through varying temperatures. Ung. hydrarg. nit. made with maize oil alone, or with one part lard and three parts oil, retains a soft, ointment consistence, not becoming hard and friable, as when made with olive oil, olive oil and lard, or lard oil, and does not lose its citron-yellow colour as readily. Emp. plumbi, made with the same proportions of oxide of lead, maize oil, and water, makes a plaster as readily as with olive oil, of the same consistence, but a little darker in colour.

WILLS OF DECEASED CHEMISTS.

The will (dated July 6, 1888) of the late Mr. James Spencer Briggs, of Blackburn, who died on February 10, 1889, was proved at Lancaster Probate Registry on March 18 last by Mr. John Henry Briggs, the deceased's son and sole executor, to whom the testator devises and bequeaths the whole of his estate, real and personal. The gross value of the personalty amounted to 5,546*l.* 13*s.* 4*d.*, and the net to 5,502*l.* 18*s.* 3*d.*

The will (dated May 6, 1881) and codicil of the late Mr. Henry Coupland, who died at Cressington Park, Liverpool, on February 21, 1889, was proved at Liverpool on April 25, 1889, by the executors, Mr. J. S. Holt and Mrs. E. Coupland (the widow). The gross personal estate amounted to 25,215*l.* 10*s.* 8*d.*, and the net to 25,053*l.* 8*s.* 8*d.* The testator leaves to his widow the furniture, plate, and effects generally at his residence. He constitutes his executors trustees of his estate, which he directs them to realise, and to pay the income to his widow, and afterwards to her child or children by him. Should there be no such child, then the testator's daughter, Mrs. Mansergh, who, the testator states, is already amply provided for, is to take a life interest in the estate, with remainder to her children, failing whom the testator leaves his brother, Mr. Richard Coupland, in contingent remainder.

The will (dated June 2, 1885) of the late Mr. Joseph Coupland, of Harrogate, pharmaceutical chemist, and of Borragge Terrace, Ripon, where he died on January 7, 1889, was proved in London on May 27 by Mrs. Coupland, the widow, and Mr. R. F. Miln, the executors. The testator bequeaths and devises all his effects and estate, real as well as personal, in possession, reversion, or remainder to his widow. The personalty amounted to 1,310*l.* 19*s.* 10*d.*

The will (dated July 21, 1888) of the late Mr. Allen Harrington, of Needham Market, chemist and druggist, who died on March 17 last, was proved at Ipswich on April 27 by Mr. A. B. Harrington, the deceased's son and sole executor, to whom is bequeathed the whole of the estate, the testator's son Arthur having been provided for already. The gross personalty amounted to 293*l.* 0*s.* 6*d.*

The will (dated March 30, 1861) of the late Mr. Thomas Hart, of Painswick, chemist and druggist, who died on March 29 last, was proved at the Gloucester Probate Registry on June 22 by Mrs. S. A. Hart, the widow and sole executrix, to whom the testator bequeaths and devises the whole of his property, real and personal. The personalty amounted to 1,683*l.* 14*s.* 6*d.*

Letters of administration of the personal estate of the late Mr. James Kirkman Bennett, of 153 Church Street, Westhoughton, chemist and druggist, who died, on March 23, 1889, intestate, were granted at Manchester District Probate Registry, to Mrs. Mary Bennett, the widow, on April 18. The sureties are Messrs. G. March, Westhoughton, and J. W. Boulton, Westhoughton. The gross personal estate amounted to 844*l.* 3*s.* 3*d.*, and the net to 509*l.* 3*s.* 3*d.*, including leaseholds.

At Leicester on May 8, 1889, administration (with the will annexed) of the personal estate of the late Mr. W. A. Leadbetter, druggist, of Melton Mowbray, who died on February 18, 1889, was granted to Miss S. A. Leadbetter, a daughter and one of the next of kin of the deceased, Mrs. Leadbetter, the wife of the said deceased, the sole executrix and sole legatee named in the will, having died in the testator's lifetime. The gross personal estate amounted to 1,896*l.* 4*s.* 4*d.*, and the net to 453*l.* 9*s.* 8*d.*

The will (dated October 3, 1878) of the late Mr. Charles Merryweather, formerly of Leicester, chemist and druggist, but late of Mount Sorrel, where he died on April 24, 1888, has been proved at Leicester by Mrs. E. Merryweather, the widow, and Messrs. J. T. Loxley and C. J. Merryweather, the executors. The personalty amounted to 175*l.* 12*s.* 7*d.* The testator leaves his property in trust to his executors for the benefit of his widow; upon her death it is to be equally divided among his children.

The will (dated October 1, 1883) of the late Mr. Richard Methuen, druggist, of Manchester, who died at Oakfield on

January 25, 1889, was proved at Manchester on April 11, 1889, by the executors, Mrs. S. J. W. Methuen (the widow) and Mr. John Hind. The gross personalty amounted to 4,182*l.* 17*s.* 2*d.*, and the net to 3,219*l.* 6*s.* 11*d.* There are no leaseholds. After giving to his widow his furniture, plate, linen, wines, and household effects, the testator devises and bequeaths his real and personal estate to his executors in trust to be realised for the benefit of his widow for life with remainder to their children.

The will (dated March 4, 1889) of the late Mr. Samuel Mullin Webster, J.P., of Warrington, chemist and alderman, who died on April 3, 1889, was proved at Liverpool on June 19 last by Mrs. M. Fitzsimon and Messrs. G. W. Webster and John Slade, three of the executors. The gross personal estate amounted to 1,190*l.* 5*s.* 9*d.*, and the net to 21*l.* 13*s.* 5*d.* The testator leaves his widow an immediate legacy of 50*l.*, together with the use for life of his furniture, plate, and household effects generally. He vests his estate in his executors, in trust, empowering them to let or lease for not more than seven years, such of his real property as they think fit, or to sell it; but of the proceeds, the testator's widow is to receive an income for life, and upon her decease the estate is to be equally divided among the testator's children.

The will (dated May 23, 1888) of the late Mr. W. A. S. Newby, of Wolsingham, Durham, chemist and druggist, who died on July 27, 1888, was proved at Durham on May 11, 1889, by Mr. S. H. Newby, the brother and sole executor. The gross personal property amounted to 352*l.* 16*s.* 6*d.* The testator gives and devises his copyhold property at Wolsingham, including his shop, dwelling-house, warehouses, and a public-house, to his nephew, Mr. W. Shepherd Newby, and the residue of his estate he bequeaths between the children of his said brother, Mr. S. H. Newby, share and share alike.

The will (dated December 24, 1880) of the late Mr. Ebenezer Stewart Payne, of Leeds, chemist and druggist, who died on March 26 last, was proved at the Wakefield Probate Registry on April 25 by Mrs. L. W. Payne, the deceased's mother and sole executor, to whom the testator bequeaths the whole of his estate and effects. The gross value of the personalty amounted to 1,433*l.* 19*s.* 1*d.*, and the net to 1,385*l.* 2*s.* 1*d.*

MARRIAGES.

[*Notices of Marriages and Deaths are inserted free if sent with proper authentication.*]

BLAIN—PHETHEAN.—On August 28, at the parish church, Bolton, by the Rev. Canon Atkinson, M.A., D.C.L., William Rushton Blain, pharmaceutical chemist, to Kate Mansergh, only daughter of the late Thomas Phethean, of the Haulgh, Bolton.

WRIGHT—DAVIDSON.—At Waverley Hotel, Aberdeen, on August 14, by the Rev. A. Young, M.A., George Wright, chemist, Buckie, to Lizzie, daughter of Mr. Robert Davidson.

DEATHS.

JONES.—On August 8, Mr. John Jones, chemist and druggist, Leeswood, near Mold, Flintshire. Aged 51.

MAITLAND.—On August 22, at Pitmachie, Oyne, N.B., Alexander Maitland, chemist and druggist. Aged 66.

MONTGOMERY.—On August 11, Helen Montgomery, chemist and druggist, Dumbarton Road, Glasgow. Aged 62.

THE British Medical Association split is becoming serious. It was intended to have held next year's meeting of the Association in London, but the inimical aspect of leading metropolitan physicians and surgeons compelled the Council at the last moment to give up the idea, and at Leeds they were unable to propose a town for next year's meeting.

AUSTRIAN APOTHEKER-VEREIN.—This society will hold its meeting in Vienna this year, beginning on Sunday evening, October 6, with a social gathering. On the Monday and Tuesday the real business, which is principally of a non-scientific character, will be taken up, and in the evenings the members will sup together and enjoy themselves.

Trade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., August 29.

LITTLE business is being done owing to the strike of the dock labourers. In values there is little change to report. Cinchona bark shows an upward tendency in sympathy with the excited state of dealings in and rise in the price of quinine. Quicksilver is decidedly firmer, while iodine is in such an uncertain state that makers will not bind themselves to any quotations for iodides.

LINSEED.—A Lincolnshire correspondent writes:—"The new crop in Lincolnshire and Yorkshire will be ready in about a month; yield above the average, and seed very good, the rains of the past month not having as yet injured it."

QUININE IN AMERICA.—Our New York correspondent cabled on August 29 that the only notable news in the drug market on that side was that a further advance had been effected in quinine, and that dealers regarded the future of this article with much confidence.

A NEW YORK DRUG EXCHANGE.—An announcement was published lately that a drug exchange was to be organised in New York similar to those in existence in London, Amsterdam, and Hamburg. A *Tribune* reporter went out to learn about this. John McKesson, of the firm of McKesson & Robbins, said: "I have heard nothing of the proposed exchange, and do not think it will work. About six years ago there was an exchange in existence here, but it did not amount to much. Those of us who had any business to do hurried back to our offices after luncheon to attend to it, and those who did not used to go around there to swap stories and smoke cigars. We have not been approached recently on the subject of forming an exchange." [Other members of the trade expressed similar views.

THE DOCKERS' STRIKE.—The influence of this strike is being keenly felt in City drug circles (although we cannot say that it has yet affected prices), and the hope of getting goods delivered promptly seemed so slender on Tuesday that before the bark sales commenced, and while Mr. Woodhouse was in the chair, Mr. Tabor (W. H. Cole & Co.), Mr. David Howard, and others spoke of the necessity of some arrangement being come to regarding the "prompt" day and reweighing. It was thought that the owners should take any risk which might be involved as regards reweighing, which, by the catalogues, was fixed for September 10. Ultimately Mr. Tabor moved, and Mr. Howard seconded, the following resolution:—

That the catalogue terms and conditions be accepted provided the existing strikes allow delivery by buyer on or before September 10, otherwise "prompt" and date of weighing over to be extended to September 14, or a week after the termination of the strike.

Mr. Woodhouse put this resolution to the room, and it was unanimously agreed to, Mr. Woodhouse remarking that he agreed with it, but he could not bind other brokers.

On the same day a number of firms connected with the produce-trade of London waited on the directors of the Dock Companies, and suggested a settlement of the strike by arbitration. Amongst those represented were Messrs. Hale & Son (drugs), Lewis & Peat (drugs), Dalton & Young (drysalteries), and Price, Hickman & Co. (dyewoods).

ACID (CITRIC) weak at 1s. 3½d. to 1s. 3¾d. per lb. for spot, and at 1s. 4d. for forward delivery. There are, it is said, a

few holders who would be glad to get rid of their stocks, but hesitate to put them on the market for fear of upsetting quotations altogether. Everything coming forward at 1s. 3½d. is likely to be snatched up by speculators.

ACID (OXALIC) very quiet at 4½d. per lb.

ACID (TARTARIC) in no demand worth speaking of at 1s. 2¾d. per lb. for English, and 1s. 2½d. per lb. for foreign, and probably less for large quantities in either makes.

AMMONIA SALTS.—*Carbonate* slow at 3½d. to 3¾d. per lb. *Salammoniac* steady, and still to be had at 36s. per cwt. for first, and at 34s. per cwt. for second, both crystals. *Sulphate* firm at 12l. 3s. 9d. for grey 24-per-cent., London, and at 12l. 5s. for Becton terms, at 12l. 1s. 3d. to 12l. 2s. 6d. for Hull, and at 12l. 3s. 9d. for Leith.

ARSENIC at 13s. to 13s. 3d. per cwt., landed terms, for best white powder.

BALSAM (CANADA) at 1s. 9d. to 1s. 10d. per lb.

BALSAM (COPAIBA) very quiet. Maranhão is quoted at 2s. 2d. to 2s. 3d. per lb., Para at 2s. 2d. per lb., Angostura at 2s. 2d.

BALSAM (PERU) is still quoted nominally at 3s. 10d. to 3s. 10½d. per lb.

BENZOL higher at 3s. 2d. to 3s. 3d. for 90-per-cent., and at 2s. 4d. for 50-per-cent.

BLEACHING-POWDER is quoted at 7l. 12s. 6d. to 7l. 15s., ex warehouse London, and at 7l. 2s. 6d. on the Tyne.

BORAX rules from 28s. to 30s. per cwt., according to make and quantity, being steady.

CAMPHOR (CRUDE) remains very firm at 105s. per cwt. for Japan, and at 102s. 6d. per cwt. nominally for China.

CAMPHOR (REFINED).—Bells are quoted at 1s. 3d. to 1s. 4d. per lb., according to make; tablets in proportion.

CANTHARIDES.—The value of Russian is as near as possible 3s. 9d. per lb., c.i.f. London; and of Chinese the cheap parcels have all been bought up at 10d. to 11d. per lb., and higher prices are now asked.

CARBOLIC ACID.—Liquid, 50-per-cent., at 10d., and 97-per-cent. at 1s. 5d. per gallon, casks free.

CASCARA SAGRADA is quoted nominally at 8d. per lb. on the spot, and offered below this figure for arrival.

CINCHONA.—The amount of bark offered on Tuesday was larger than it was a fortnight ago. It consisted of the following:—

	Packages		Packages
Ceylon bark	863	of which	652 were sold
South American bark ..	787	"	580 "
Java bark	229	"	114 "
African bark	188	"	188 "
East Indian bark	126	"	124 "
Total	2,193	"	1,658 "

Although the supply was better than usual it was not quite equal to the demand, and in consequence buyers had to give slightly higher rates for what they secured. Sellers, on the other hand, took advantage of the firmer tendency, so that no fewer than 200 packages of Ceylon bark, which would have found buyers readily, were withdrawn; only 11 packages of this variety of bark failed to reach a price upon which buyers and sellers could agree. There was the same disposition in regard to Java bark; one broker offered 163 bales of chippy and dusty bark, but he could only get his price for 48 of them, and he bought in the rest. Throughout the hour during which the sale lasted competition was brisk and general. All over we estimate the advance to be about 5 per cent. For sound bark the following were the prices obtained:—

CYLON BARK.—*Original*: Grey stem chips, 3½d. to 4½d.; bolder, with quilled pieces and less dust, 6d. to 6½d.; shavings, of low quality, 2½d. to 3d. The root bark sold well, the best at 6½d. to 7½d., poorer lots selling at 4d. As usual, much of the red was of very low quality indeed, there being a difficulty in getting 1½d. for some packages, and 1¾d. and 2d. were common prices for stem chips very much dusty; bolder and brighter lots went up to 3½d., while shavings sold at 1¾d. to 3d. for ordinary, and 3½d. to 4d. for fine bright

root bark, generally dusty and poor, but the better lots bold and well matured, fetched 3*d.* and 4*d.* Yellow varieties, good bold chips, 5½*d.* to 6½*d.*; shavings, matured and bright, 7*d.* and 7½*d.*; root, 8*d.* *Renewed*: Grey—All offered was of excellent quality, and was eagerly bought at 5½*d.* to 6½*d.* for chips, and 7*d.* for shavings. Red—Stem and branch chips, thin and dusty to bold and bright, 3½*d.* to 5½*d.*; shavings, 5*d.* to 6*d.* Yellow varieties—Good bold quilly chips, 8½*d.* to 10½*d.*; shavings, 7½*d.* to 8*d.*

SOUTH AMERICAN BARK.—The show of quilled Calisaya bark was exceptionally fine, but there were over 100 packages of miserable dusty material bought in at a low figure. Chippy to small quill bark sold at 4½*d.* to 5*d.*; fair short bright quill, 5½*d.* to 6½*d.*; bold, 7*d.* to 8*d.*

JAVA BARK was entirely of fresh import. *Ledgeriana*, dusty to good chips, somewhat variable as to colour, and comprising most of what was sold, fetched 3*d.* to 5*d.*, much of it selling at the higher figure and 4½*d.* Fine rich chips, 8½*d.* Seven parcels of bold root bark sold at 7*d.*

AFRICAN BARK.—Only 15 of the 188 bales were undamaged; these sold at 4½*d.* and 5½*d.*, the rest varied in price from 3½*d.* to 4½*d.* for 1 CCD. The bark was all Calisaya in excellently harvested quills.

EAST INDIAN BARK.—Original chip, *Succirubra*, dull to bright and bold, 2*d.* to 3½*d.*; renewed shavings, 3½*d.*; chips, 4½*d.*; root bark, 4*d.* *Crown* shavings, 3*d.* *Officinalis*, small chippy, 3½*d.*; bolder, 5½*d.* to 6½*d.*; fine renewed and mossed, 7*d.* to 8*d.*

The following is a statement of the total quantity of bark exported from Ceylon to all parts from October 1, 1888 (commencement of season), to August 1, 1889:—Season 1888-9, 8,684,835 lbs.; 1887-8, 9,978,480; 1886-7, 12,380,891; 1885-6, 13,717,867. In connection with this, and in relation to the future supply, a gentleman who has recently visited the Ceylon estates reports that he does not see how the planters are to send away much more than 6,000,000 lbs. of bark next year, most of which will come from healthy trees.

CIYET has advanced nominally to 12*s.* per oz.

COPPER SULPHATE lower again, at 24*l.* to 24*l.* 10*s.* per ton for immediate, and 22*l.* for forward delivery.

CREAM OF TARTAR.—French white crystals selling at 90*s.* to 90*s.* 6*d.* per cwt. for first, without improvement.

CUMIN SEED.—There is more than enough of all descriptions on the market, Malta selling, however, a little above late rates, and 25*s.* per cwt. is asked by some holders for new seed.

CUTCH.—Quiet. Double Eagle at 28*s.* per cwt., Cock at 26*s.* 6*d.* per cwt., reweights; Star B at 27*s.* 9*d.* per cwt., MM slabs at 27*s.* per cwt., RS slabs at 22*s.* 6*d.* to 23*s.* 6*d.* per cwt., and RS block at 24*s.* to 25*s.* per cwt.

ERGOT OF RYE.—Very little doing on the spot. The nominal quotations are: 1*s.* 2½*d.* per lb. c.i.f. London for Russian, and 1*s.* 8*d.* per lb. for good Spanish on the spot.

FENUGREEK SEED quiet at 6*s.* 9*d.* to 7*s.* per cwt. for Mogadore.

GALLS (CHINA) are scarce, and have been sold up to 70*s.* per cwt., and likely to go higher still, 75*s.* per cwt. being now asked.

GALLS (TURKEY) have been in strong demand at hardening prices, selling at 40*s.* to 45*s.* per cwt. for white Bassorah, at 47*s.* 6*d.* to 50*s.* per cwt. for green ditto, and at 54*s.* to 55*s.* per cwt. for blue ditto, Smyrna and Morea galls being also in good request.

GAMBIER.—Lower and weak, at 30*s.* 9*d.* per cwt. for spot, and at 28*s.* per cwt. for September-October, and at 27*s.* 6*d.* per cwt. for October-November.

GLYCERINE lower at 63*s.* for double-distilled, s.g. 1.260.

GUM ARABIC.—There were offered at to-day's auctions 2,704 packages, comprising 2,293 packages E.I., 43 Australian, 161 Aden, 80 Cape, 74 W.C. African, 24 Mogadore Amrad, 29 Egyptian. The auctions passed off rather quiet, with sales of about 550 packages at lower rates. Rather specky clean Aden sorts at 65*s.*, pickings at 27*s.* Cape, fair drop at 70*s.*, low at 13*s.*, and block selected at 20*s.* Australian, fair glossy from 35*s.* to 40*s.*, and blocky at 20*s.* to 22*s.* Amrad, siftings, red to pale, at 32*s.* to 69*s.*; good red Amrad drop at

61*s.* to 62*s.* *Ghatti*, selected, at 80*s.* to 94*s.*, good fair at 36*s.*, fair at 30*s.* to 32*s.*, middling at 28*s.* to 29*s.*, siftings at 12*s.* to 14*s.*, pickings at 5*s.* to 12*s.* *Bombay roll*, dust at 2*s.* 6*d.*

GUM OLIBANUM.—Thirty-two cases sold, fair garblings at 13*s.* per cwt., and more or less oil-damaged (12 cases) at 10*s.* to 20*s.* for drop, at 6*s.* for garblings, and at 6*s.* to 8*s.* for siftings.

GUM TRAGACANTH very quiet, with sales of retail lots. Owners are, however, very firm, and confidently anticipate getting much higher prices presently. The 15 bags Hog offered in this day's gum sales were of no interest.

ISINGLASS.—The periodical sales will be held to-morrow, Friday, for which 379 sundry packages are advertised. We may call attention here to the sale which is to take place on Thursday next, of which particulars are given elsewhere.

MERCURIALS.—Unchanged, at 3*s.* 7*d.* per lb. for calomel; at 3*s.* 11*d.* for corrosive sublimate; at 3*s.* 10*d.* for red precipitate; at 3*s.* 9*d.* for white precipitate; and at 3*s.* 2*d.* per lb. for English vermilion.

MYRABOLANS are still in large request, fair Madras selling at 6*s.* 6*d.*

OIL (CASTOR).—Italian is quoted at 5½*d.* per lb., and Calcutta has been sold in Liverpool at 3½*d.* per lb. for good seconds in small quantities. In London 3½*d.* per lb. is asked for the same quality.

OILS (ESSENTIAL).—*Star anise* is worth 5*s.* 10½*d.* to 5*s.* 11*d.* per lb. on the spot, and 5*s.* 7*d.* per lb. for arrival. *Cassia oil* dull, at 3*s.* 4*d.* to 3*s.* 5*d.* per lb. *Citronella*, 5½*d.* to 11½*d.* per oz. *Lemongrass oil*, at 1½*d.* to 1½*d.* per oz. *Gingergrass oil*, at 1½*d.* to 3*d.* per oz. *Peppermint*, American Hotchkiss H.G., at 12*s.* to 12*s.* 3*d.* per lb.

OILS (VARIOUS).—*Cocanut oil* is steady, Ceylon, at 23*l.* 15*s.* to 24*l.*; *Cochin*, at 26*l.* 15*s.* to 27*s.* 10*s.*; *Mauritius*, at 24*l.* 10*s.* to 24*l.* 15*s.* *Cottonseed oil*, at 24*l.* for crude on the spot, and at 27*l.* to 28*l.* according to make and packages; December-April, ordinary, at 24*l.* 15*s.*; Hull, refined, at 25*l.* 5*s.* for naked. *Linsed oil* sells slowly on the spot, at 21*l.* 17*s.* 6*d.* waterside in pipes; land, at 22*l.*; and in barrels, at 22*l.* 2*s.* 6*d.*; September-December, at 21*l.* 12*s.* 6*d.* *Olive oil* is quoted at 35*l.* to 36*l.* for Spanish; at 36*l.* for Messina; and at 33*l.* for Mogadore. *Palm oil*, fine Lagos, at 25*l.* 10*s.* to 26*l.* *Petroleum*, no change worth speaking of; *American*, spot, at 5½*d.* to 6*d.*, as to brand and terms; September-December, at 6*d.* to 6½*d.*; *Russian*, spot, at 5½*d.* to 5½*d.*; September-December, at 5½*d.* to 6*d.* *Rape oil*, fairly steady; on the spot, refined English, at 31*l.* 15*s.*; brown, at 30*l.* 5*s.*; September-December, at 29*l.* 10*s.* to 29*l.* 15*s.* *Turpentine* is selling without much change; American spirits, spot, at 35*s.*; September-December, at 34*s.* 6*d.*; and January-April, at 35*s.*

PODOPHYLLUM.—Dr. G. Watt, C.I.E., has discovered that in the higher Himalayas a species of podophyllum (*P. emodi*) grows in wild profusion, and yields three times as much of the gum resin as the American root (*P. peltatum*). Moreover, this valuable plant has taken a wide range in the higher, richer, and more shady temperate forests from Sikkim to Simla, Cashmere, Hazara, Tibet, and the Karam Valley. It is fairly plentiful on the northern forest-clad slope of the frequented Shalai Hill, and on the equally well-known Nagkanda Hill, and the Chumba State, in the mixed forests of which the peony rose-like plant grows freely. Dr. Watt remarks that it is somewhat surprising that the natives of India, who have discovered so many drugs, should have failed to detect the medicinal properties of the podophyllum root. It is just possible, however, that more may be known about it among the hill tribes of Kulu than among those of the plains of India, and it may turn out that in those regions where the plant most abounds it has long been used as a medicine. The discovery is likely to provide the hill tribes of the higher Himalaya with a lucrative trade, especially as Mr. Hooper, the Madras quinologist, has, after analysis, pronounced it to possess the same medicinal properties as the American plant.

POTASH SALTS.—*Bichromate*, at 4*d.* per lb. *Chlorate*, steady, at 4½*d.* per lb. *Prussiate*, foreign, quieter, at 7*d.*, and English, at 7½*d.*

QUICKSILVER.—Sales on Thursday are reported at an

advance of 2s. on the last-quoted prices. Elsewhere in this issue we give an interesting account of Servian quicksilver.

QUININE.—A renewed demand has set in, and a good business been done, selling at 1s. 1½d. to 1s. 2d. for B&S, Brunswick, and others, and for delivery November-December at 1s. 2d. to 1s. 2½d., rising.

SENNA.—*Tinnevely*: Several lots, *ex* last sales, have been resold on the spot at a good profit, and there will be plenty of buyers for the recent heavy arrivals, provided the samples are forthcoming in time for next drug sales, Thursday, September 5.

SHELLAC.—The moderate supply in Tuesday's auctions met a steady demand, second orange realising 1s. advance, and of the 650 cases offered, 205 were sold as follows:—Second orange, worked fair bright, at 70s.; ordinary livery at 67s. to 69s.; ditto unworked fair at 70s.; and ordinary livery at 66s. to 67s.; AC garnet unworked at 56s.; and a small lot of good third button at 79s. Value of TN standard now 70s. In addition to the parcels sold as above, there has been a good business done since Sunday; AC garnet spot, 100 chests at 55s. 6d. to 57s.; and 500 chests for delivery, TN, October at 71s.; AC garnet, September, at 57s. 6d.; and October at 58s. to 58s. 6d.; November at 59s.; superior button at 97s. to 98s.; and B.L. August-November, at 90s. c.i.f. After "call" 57s. paid for 100 cases AC.

		Sept.	Oct.	Nov.	Dec.
TN Standard, sellers ..	..	70/6	71/6	71/6	72/0
" buyers ..	..	70/6	71/6	71/0	71/6
AC Garnet, sellers ..	..	58/0	59/0	59/6	58/6
" buyers ..	..	57/6	58/0	58/6	57/6

SODA SALTS.—Ash at 1½d. landed. Bicarbonate at 5l. 2s. 6d. on warehouse. Caustic in slow demand, cream at 6l. 15s., and white 60-per-cent., at 6l. 15s. to 6l. 17s. 6d. landed. Crystals firm at 50s. 6d. to 51s. *ex* ship London; at 43s. 6d. to 44s. on the Tyne; nitrate at 8l. 10s. for ordinary on the spot, and at 9l. 5s. for chemical.

SPICES.—*Cinnamon*.—At the quarterly sales held on Monday, August 26, 1,247 bales were offered, against 1,351 in May last, and 1,357 in August, 1888, of which 859 were sold. There was a rather brisk demand, good and fine qualities realising from 1d. to 2d., and in some instances 3d., above last sale prices, other descriptions being steady. First, ordinary to superior, at 8d. to 1s. 8d. per lb.; second, low to superior, at 7½d. to 1s. 6d. per lb.; third, low to superior, at 6½d. to 1s. 4d. per lb.; fourth, low to good, at 5½d. to 9d. Broken sold at 6d. to 6½d., and 27 bags chips at 6½d. for quillings. The next sales are fixed for November 25. Owing to the strike continuing, no public sales were held yesterday, and we quote the nearest values of *Pepper*, black Singapore, at 7½d. to 7¼d. for spot, and lower for arrivals; August-October steamer, at 6½d. to 6¼d.; black Penang, at 5d. to 6d. per lb.; W.C., at 6¼d. White Singapore, at 11½d. per lb.; white Penang, at 8½d., dearer for arrival; August-October steamer, at 8½d. to 8¼d. *Pimento*, ordinary to good, at 3d. to 3¼d. per lb. *Zanzibar Cloves*, at 6½d. to 6¾d. per lb. *Mace*, ordinary to good, at 2s. 6d. to 3s. 1d. *Nutmegs*, from 132 to 60 to the lb., at 2s. to 3s. 8d. *Cassia lignea*, at 22s.

TEA.—The trade has been quite paralysed this week by the strike, and very little business has passed either by public auction or private sale. No public auction of new Kaisow was held till Monday owing to the difficulty of putting packages on show at the warehouses, but a few sales, of Chingwo and Panyong sorts chiefly, were effected privately on the previous Saturday, ranging up to 1s. 4½d. per lb. for fine Chingwo. New Saryuncs sold on Monday from 8¾d. upwards, and showed fair value, while new Chingwos and Panyongs have opened reasonably, far below last season's extravagant rates. Soomooos are so far very scarce, but some very high prices have been obtained for finest Padrae and Sueykut, up to 1s. 6d. per lb. for the latter. Monings are very dull, a few parcels being sold on Tuesday at irregular rates, and second crop Ningchows from 7½d. to 9d. showed fair value. The bulk of the catalogues for Tuesday were, however, withdrawn. The sales of Assam and Ceylon for the week have been small, and have mostly gone off at good prices.

TURMERIC.—Bengal is selling at 10s. 6d. for middling quality.

THE AMERICAN MARKETS.

(From our own Correspondent.)

NEW YORK, August 16.

THE demand for export has been quite active, especially for new season's roots, herbs, &c.

CURAÇAO ALOES.—The 700 boxes that were held by the importers were this week bought up by the trade at about equal to 18s. c.i.f. It now remains to be seen whether any further supplies will come forward.

GOLDEN SEAL.—The new crop is arriving slowly, and is bought up as soon as offered. Sales have been made at 40c., or about 1s. 9½d. c.i.f. It seems highly probable that if large supplies of the new crop come to hand the market must go lower.

OIL OF PEPPERMINT.—The reports constantly coming to hand about damage to the crop by heavy rains have had the effect of stirring up business in both bulk oil and HGH. Seventy-five cases of the latter changed hands at \$2.60, being taken by speculators; more can be had at same price, or, say, 11s. 3d. c.i.f. Fully 2,000 lbs. of bulk oil were sold, mostly for export, at equal to 8s. 6d. c.i.f., and it is now doubtful if any pure quality can be had under 9s. The new crop ought to come on the market soon, but the season is a late one, and until it is known what the opening price will be, we are not likely to see any very large transactions. The general opinion appears to be that, unless American oil rules low in price, there will not be much demand for it.

QUININE.—Our market responds slowly to the advance in Europe. The makers no longer offer for forward delivery at current rates, and are practically out of the market, the bulk of the trade being done by second-hands at equal to 1s. to 1s. 1d., 5 per cent. The consumptive demand is very large, much larger than usual, which is the most encouraging feature, as, if it keeps up (and it probably will), there will be some hope of the large stocks in outside hands being reduced to reasonable limits. There is no speculation in the article at present.

SENEGA ROOT.—This article has attracted most attention, and keeps advancing. Orders from Europe have been coming in very freely, and, as the dealers in the West report light arrivals from the collectors, they advance the price with each sale. One of the largest dealers in Minneapolis writes to say that if the demand keeps up at present rates he will be obliged to withdraw from the market even at the advance. The market price to-day here is 39c. for Minnesota, or about 1s. 8½d. c.i.f. London; for very superior quality a little more is asked. There is no Manitoba root offering.

THE DUTCH MARKET.

AMSTERDAM, August 28.

CINCHONA.—The bark sales which will be held at Amsterdam on September 5 will consist of 2,884 bales and 167 cases (269.29 tons), divided as follows:—Java bark, from Government plantations, 417 bales 48 cases (about 392 tons); from private plantations, 2,456 bales 119 cases (about 228.8 tons). British Indian bark, 11 bales (about 1.29 tons). Druggists' bark: *Succirubra*, quills, 131 cases; broken quills and chips, 194 bales 6 cases; root, 52 bales; E. *Schuhkraft*, quills, 11 cases; broken quills and chips, 25 bales; root, 30 bales. Manufacturers' bark: *Officialis*, quills; broken quills and chips, 16 bales; root; *Ledgeriana*, quills; broken quills and chips, 1,907 bales; root, 602 bales; *Hybridis*, quills, 19 cases; broken quills and chips, 45 bales; root, 13 bales (237.32 tons). Manufacturers' barks contain about 10.6 tons of sulphate of quinine, or 4.51 per cent. on the average. About 0.41 tons contain 0.1 per cent. sulph. of chinin; 9.27 tons, 1.2 per cent.; 36.79 tons, 2.3 per cent.; 81.76 tons, 3.4 per cent.; 35.47 tons, 4.5 per cent.; 20.63 tons, 5.6 per cent.; 12.69 tons, 6.7 per cent.; 24.66 tons, 7.8 per cent.; 11.98 tons, 8.9 per cent.; 1.75 tons, 9.10 per cent.; 1.91 tons, 10.11 per cent. (about 237.32 tons).



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulæ consult the last volume, if you have it.

Letters, queries, &c. will be attended to in the order received.

The Patent-medicine Trade.

SIR,—Is there no way in which those of us who push our own specialities could unite to our mutual benefit? I have an idea that if a few of us in adjacent counties could agree to adopt a set of recipes, and push them under the same titles, it would be much more productive and beneficial to the trade. Say two or three chemists in each county united together to carry out such a scheme; they fix on a recipe for, let us say, "Liver Pills"; then agree upon a uniform label, handbills, show-cards, &c. The recipe could either be handed over to one of themselves, or to some reliable wholesale house, bound to secrecy, and who would supply the pills boxed, labelled, and stamped at a reasonable rate. The retailers to be pledged to marked prices, and to unite in counties to advertise in the local papers. Any chemist agreeing to the above conditions might become a retailer, and after a while it might be advisable for the combination to unite to defray expenses of advertising in the leading journals. Of course other medicines would be added from time to time. For these, in addition to advertisements, we should have the remedies recommended *vivâ voce*. Not only would such a scheme pay financially, but, I think, morally, for if there is one thing in the trade disgusts me more than our want of "go," it is our jealousy one of another.

I am,

ORCADIA. (113/15.)

SIR,—One is much amused by the immense pains that many of our brethren take to devise ways and means to induce the public to give more than the current market price for the above. In my opinion, no single expedient worth trying has yet been published; and wise men will go to the original, common-sense, and workable suggestion, viz. to put patents out of sight, and to fill up all our show-space with goods of our own make.

I think that some months ago I asked you or your correspondents to favour the trade with a list of proprietaries that would be found useful to make in our various departments, such as preparations for external and internal use, the hair, skin, teeth, gums, &c. Your own valuable journal and the Diaries have, from time to time, published the formulas of sufficient of such; but, if any one is wanted in a hurry and the particular *C. & D.* is not at hand, the delay is likely to be fatal to the enterprise. I beg to suggest that you publish a small book of reliable formulæ; and you will thus add another invaluable work to the two which you have already given to us, and will afresh earn our gratitude as the best friend we have.

Signs are not even now wanting that a severe competition is going on locally, among chemists themselves, for the sale of proprietaries; and the man who invests most largely in paper and ink gets a lion's share of public patronage. Nothing is more common than this, that we can sell our own goods when asked for some other advertised remedy. My neighbours, to my certain knowledge, take the wind out of my sails in this way; I return the compliment on every occasion; and the transaction is mutually legitimate.

Localities differing in character will require a different style and class of goods, as a matter of course.

One objection I foresee you will be likely to make; but the profits of the little book would compensate.

Yours truly,

HEDER. (117/9.)

"Doubting Thomas" (117/27) writes a letter based on the assumption that wholesale dealers in patent medicines have a profit of at least 15 per cent. This is so notoriously incorrect that it renders his argument valueless. If he will refer to THE CHEMIST AND DRUGGIST of March 23 last he will get more correct ideas respecting wholesale trade.

The War Waxes Fiercer.

SIR,—We quite agree with your correspondent who advocates chemists selling tea, &c., in places where grocers sell patent medicines. We contemplate keeping at a separate counter all grocer's tinned meats, fruits, sauces, tea, &c., and selling at a shade over cost, say 5 per cent., so as to "cut" the grocers. We can do this for cash without extra rent or hands, while retaining our legitimate trade.

We shall issue counter bills (costing only 12s. for 10,000) containing list of groceries, and see how our cutting friends will like it.

Yours truly,

TIT FOR TAT.

Arsenic Prescriptions.

Mr. W. Rowe, of Leicester, says he has a customer who has taken liq. arsenicalis, 2 minims, ter die, since August, 1857. Another customer is taking liq. sodæ arseniatis and applying liq. arsenicalis.

SIR,—On Monday, August 5, Mrs. Maybrick made a statement to the effect that she used lavender water, elder water, "benzoline," arsenic, and other ingredients as a cosmetic. About 8 10 A.M. on the following morning a customer asked for 3d. lavender water, 3d. elder water, and half-dozen fly-papers. I presume the "benzoline" she would procure at the nearest chandler's. I have not yet heard of the consequences of her manipulations, but let us hope the cosmetic has not been the means of doing her more harm than good.

Liverpool, August 27.

YAPP.

Irish Pharmacy.

SIR,—I am pleased to see a letter in your issue of August 24 on the above subject from "Carmine," and would, with your permission, reply to a few points raised therein. He says he is unable "to see what advantage is to be gained by such a union"—meaning, of the British and Irish Pharmaceutical Societies. I think there are several reasons why an amalgamation would be desirable. In the first place, I would remind him that "union is strength," and, if the two bodies were united, the Irish branch would have to raise their standard for pharmaceutical chemists, so as to bring it up to the level of the other Society, and thus make way for the minor qualification of "Chemist and Druggist," which would satisfy our friends of the Chemists and Druggists' Association, bringing about harmony among pharmacists generally. I do not suppose that this could be brought about "without an appeal to Parliament," as "Carmine" says, but then we would have the prospect of a definite settlement before us, which would be a great boon to many in Ireland at least. Another important reason is that neither Society recognises the other's certificate, the consequence being, if an Irish licentiate wishes to take a business in England he cannot do so, unless by putting himself to the trouble and expense of going right through the British Society's examinations and *vice versa*. This, I think, is a great hardship, as the Irish pharmaceutical examination is considered equal to the English Minor. I have not, as "Carmine" seems to think, lost all confidence in the Irish Council yet, because I think there are some very good men on it at present; however, it must be admitted that they made a serious blunder in rejecting a settlement of the differences between the chemists and druggists and themselves. Even "Carmine" will, no doubt, agree with me on this point. With regard to the life-membership subscription, for which he takes me to task, I

merely wrote from memory, but, on referring to the Official Calendar, I find under Rule III., relating to members, "The annual subscription of elected members of the Society shall be one guinea, payable in advance on 1st October in each year, or a life membership of ten guineas." So I am afraid "Carmine" is also in the wrong in this respect, as well as myself.

Yours truly,

August 26.

COCAINE. (115/63.)

SIR,—May I, through the medium of your columns, which, I believe, meet the eyes of almost every pharmaceutical chemist in Ireland, urge on them the necessity as well as the privilege of becoming members of the Pharmaceutical Society. The October annual meeting is almost upon us, and, as it is there that members have most power, it is very desirable that, if possible, every licentiate be also a member before that date.

It has been stated as a reason for not becoming a member that members receive no compensation in any way for their guinea fee; the *Pharmaceutical Journal* they regard as worthless, and I certainly do not blame them. But it is simply the licentiates' and members' own faults that they get no value. Let all licentiates become members; let all members send in as their representatives on the Council men who are pledged, through election addresses, to give them what they ask for, and although it may take two or three years to do this, eventually there will be twenty-one men on the Council, from amongst the members themselves, knowing what the members desire and pledged to grant them that desire. This consummation for which the licentiates ask is withheld from them only by themselves; they can, after a short time, grant to themselves anything which they may wish.

The next monthly meeting of the Pharmaceutical Society will be held on Wednesday, September 4, and I would earnestly ask those licentiates who have not yet become members to forward me their names *at once*, so that I can have them nominated on that date and formally elected on Wednesday, October 2, in time for the election on Monday, October 7.

I am, sir, yours faithfully,

E. MCCREERY S. HILL, M.P.S.I., L.M.,

Hon. Sec. Irish Pharm. Chemists' Association.

52 Wesley Terrace, Up. Clanbrassil Street, Dublin,
August 27.

Brush Varnish or Polish.

In answer to 105/51, *Gilgen* (114/72) sends the following:—

Shellac	8 oz.
G. benzoin	3 "
Resin	3 "
Sp. v. meth.	2 pints

Dissolve.

We have, too, the following from *R. B.* (115/18):—

Manilla copal gum	2 lbs.
Sandarach	1½ "
Meth. spirit	1 gallon

H. C. (116/1) says:—I have supplied the following to a practical man for the last five years:—

	Oz.
Mastic	1½
Shellac	18
Sandarach	2
Spt. methyl.	60

Tulip (115/72) writes:—

Ordinary French polish of good quality..	5 pints
Gum shellac	14 oz.
Resin	2 "

Dissolve and strain.

Pink Colour for Show-bottles.

SIR,—“Cedas” complains of his inability to produce a beautiful pink colour from directions given in the *DIARY*;

the writer has tried it, and finds it tedious, bungling, and unsatisfactory.

Beautiful, very rich, and permanent shades of rose, from a delicate pink to blood red, may be made as follows:—

Cudbear	3ij.
Water	3x.

Infuse (cold) for a day or so, filter, and add to water (need not be distilled) till the required shade is produced, and add to each gallon liq. ammon. fort. 3ss.

This sometimes goes a little cloudy about second day, but in a day or two it clears itself by throwing down a precipitate, but so slight a one as to scarcely need removal from the carboy. Distilled water might obviate this. Anyhow, it is better to filter the water when not using distilled.

Yours truly,

G. L. DOUTHWAITE.

[Our correspondent adds that purple No. 1 is also a failure. We may repeat that the cobalt pink is one of the finest colours available to druggists. We know of several carboys of it throughout the country, which have been in the windows for twenty to forty years, and they are as bright and powerful as ever. The only drawback to it is that it gives a deposit for a few months, but this is a matter for the exercise of patience. Only metallic colours are permanent; all of an organic nature fade.—ED.]

SIR,—Six months ago I made the carboy colour known as cobalt-purple, and succeeded in obtaining a very beautiful and, so far, permanent colour. To do this I kept on adding “ammon. carb.” until I had obtained the desired result. I had to use, as near as I can compute without actual weighing, somewhere near twelve to one before the precipitate was redissolved, and even then it did not all go perfectly into solution. I set the solution aside for some time (about three weeks), and finally filtered it. The result is splendid. The water used for dissolving the ammon. carb. was slightly warmed, about 100° Fahr.

TULIP. (116/47.)

Attendance at an Assize Court.

SIR,—Your correspondent may be interested to hear that I was promised a guinea a day and expenses; but that, as my friends lost their case, I took the latter only. No question as to the correctness of my charge arose.

Yours truly,

HEDER.

LEGAL QUERIES.

115/64. *Medicus*.—Although paid weekly we think you would be justified, on the ground of custom of the trade, in demanding a month's salary in lieu of notice. If the case were tried the verdict would probably depend on whether the Court believed your version of the affair or your employer's. Before proceeding beyond an application we should recommend you to get the advice of a solicitor, who would tell you whether your available evidence was likely to be sufficient to support your claim.

115/71. *One who wishes to do Right* should begin by giving us his name and address. We do not reply to anonymous correspondents.

116/27. *Nebo*.—You must apply for registration of a trade-mark on the proper form, which can be obtained either from your post-office or from the Trade-marks Office, Southampton Buildings, London, E.C. The fee—payable on application—is 5s., and, if the registration of the mark be accepted, costs 1l. You had better read the article on trade-marks in the *C. & D. DIARY*, 1888.

73/26. *Lozenge* asks:—“Can one sell by the ounce cough lozenges stamped with a name—say, for instance, ‘Johnson’s cough lozenges’?” Certainly he can. Possibly our correspondent wants to know if such lozenges are liable to

medicine-stamp duty. They would be; because calling them "Johnson's" implies a proprietary claim.

117/4. *Carboy*.—Paregoric being now a synonym for tinct. camph. co. in the B.P., it would be illegal to sell an article labelled, "Paregoric, free from opium." It is illegal for an unqualified person to sell precipitate powder.

MISCELLANEOUS INQUIRIES.

A large number of correspondents ask us for formulæ and other information already published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulæ or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4d. each.

112/16. *Parito*.—**Indian Brandy**.—See August 25, 1888, page 259. This is not a tincture of "Indian bark."

111/10. *Leander*.—(1) **Violet powder**: Starch, 6 lbs.; orris root, 1 lb.; ol. bergamot, 2 drachms; ol. neroli, 10 drops. (2) **Bay rum** without distillation. The following formula is said to give good results:—Oil of bayberry, 1 oz.; Jamaica rum, 1 pint; strong alcohol, 4 pints; water, 3 pints; mix and filter. (3) "Formula for *ung. sambuci virid.*, and whether any other leaves would do to colour than elder leaves?" Fresh elder leaves, 3 lbs.; suet, 4 lbs.; lard, 2 lbs.; boil together until leaves become crisp, strain, allow to cool slowly; do not stir towards end of cooling to allow of granulation. Try spinach leaves; but elder leaves should be plentiful at present.

111/49. *Dact* wishes to know the properties of **alloxan**, and where obtainable. We cannot afford the space to go into all its properties, but would refer him to any standard work on physiological chemistry. It is obtained by the oxidation of uric acid with either nitric acid or chlorate of potassium. It may be obtained, either anhydrous or containing one or four molecules of water, and is converted into alloxantin by reducing agents. It is formed by the nitric acid during the application of the murexide test for uric acid in urine analysis. Try any technical chemist for it.

111/44. *C. W.*—For green colour for carboys see **DIARY**, 1889. It is not necessary to use filtered water, but your colours are always brighter when you do.

Sarsaparilla Beer was wanted on July 20. Mr. W. R. Rainbow kindly sends us the following formulæ, taken from Cranfield's "Recipes for Non-intoxicating Drinks":—

(1)	Tart. acid	.. .. .	4 oz.
	Sarsaparilla, Jamaica	.. .. .	1 lb.
	Sassafras	.. .. .	$\frac{1}{2}$ "
	Sugar	.. .. .	10 lbs.
	Water	.. .. .	10 gallons
	Yeast	.. .. .	$\frac{1}{2}$ pint

Dissolve the sugar in half the water. Boil the herbs in the other half, add the acid after boiling for half hour. Strain, and mix the two liquors, add the yeast and ferment in a warm place about twelve hours, then bottle.

(2)	Dec. sarsæ, co. conc.	.. .. .	2 oz.
	Ess. sassafras	.. .. .	4 "
	Sarsa wine essence	.. .. .	2 lbs.
	Sugar	.. .. .	10 "
	Water	.. .. .	10 gallons
	Yeast	.. .. .	$\frac{1}{2}$ pint

Mix essences together. Dissolve the sugar in the water, add essences and yeast, and work, as in No. 1.

112/7, *F. F. W.*; 112/34, *Inquirer*; and 115/18, *R. B.*—**Books for Prescribing**.—See reply to "Horace" in our issue of August 17.

111/45. *Nemo*.—The results of research into the chemical constituents of common balm (*Melissa officinalis*), so far as we know, have not been published. All we can find about it is that it contains tannin, bitter extractive (?), gum, and a volatile oil said to contain a camphor in solution.

109/9. *W. J. T.*—The letters M.B.M.R.A., used by a medical herbalist, probably mean Member British Medical Reform Association, a society which, we think, is not now in active existence.

112/11. *W. L. P.* wishes to know of some chemical that would soften horns on an animal's head, so as to alter the shape without causing pain. We do not know of any chemical that would answer your purpose. Is it a case of the horns curving into the head? If so, the usual course is for a piece to be sawn off the point of the horns.

114/50. *Mason*.—**Practical Electricity**.—The following are suitable works:—Du Moncel's "Electric Lighting" (Routledge, 2s. 6d.), Thompson's "Electricity and Magnetism" (Macmillan), Ayrton's "Practical Electricity" (Cassell). In the first instance get the "Practical Instructions" regarding electric bells, &c., published by Gent & Co., of Leicester.

112/18. *Ferrum*.—The material sent is not of pharmaceutical interest.

111/63. *Nellie*.—**Essence of Patchouly**.—We have always had the best results with patchouly and rose. The latter odour has a refining influence, and there is nothing else which is so satisfactory in removing the characteristic empyreuma of the patchouly. Try the following for a triple essence:—

Oil of patchouly	.. .. .	80 minims
Otto of rose	.. .. .	25 "
Rectified spirit (treble-distilled)	.. .. .	1 pint

Mix and set aside for a few weeks before retailing.

In answer to 105/11, *Ervv.* (115/50) says **Artificial Essence of Musk** is obtainable of Evans, Lescher & Webb, 60 Bartholomew Close, London.

Cyanide Bottles.—Mr. H. Cumber, jun., Guernsey, in reply to *Tyro* (112/39) writes:—"I have prepared for my own use, as well as for customers, cyanide bottles, and find the best plan to be to place the cyanide of potassium in coarse powder in the bottom of a dry bottle in the proportion of $\frac{1}{2}$ oz. for a 6-oz. or 8-oz. wide-mouth bottle, and pour over it plaster of Paris, mixed with water to a thin cream, just deep enough to cover the cyanide, and, if it does not set in half an hour or so, throw in a little dry plaster to absorb the supernatant moisture."

112/19. *W. F. S.* wishes to know what to do to prevent leakage from the **Joints of a Boiler** cemented by means of red lead. The water used is obtained from a new well, and contains $98\frac{1}{2}$ grains of solid matter per gallon, and the steam seems to act upon the red lead. [This water contains a pretty large quantity of solid matter, part of which is probably a magnesia salt. Experiments have shown that such waters contain chlorides, so that at a certain point magnesium chloride is formed, and this is afterwards decomposed into oxychloride and hydrochloric acid. (See note in this journal, May 11, page 653.) The proper plan for dealing with the water is to add 2 lbs. of soda crystals to every 300 gallons, and allow the mixture to settle before it is put in the boiler.]

112/64. *Imprimatur*.—We cannot undertake to devise formulæ for perfumes samples of which are submitted to us. You will find Piesse's formula on page 89, July 21, 1888.

113/36. *Rummy*.—**Bay Rhum** is applied to the hair in the undiluted state, and is generally sold in this condition. There are **Bay Rhum Lotions** in which the spirit is one of the ingredients, as in the following, for example:—

Bay rhum	10 oz.
Glycerine	1 "
Vinegar of cantharides	$\frac{1}{2}$ "
Eau de Cologne	$\frac{1}{2}$ "
Mix and filter.	

113/30. *H*.—**Weight of Pearl Coating on Pills**.—This correspondent wishes to know the average increase in weight per lb. for ordinary coating of 3, 4, or 5 grain pills. We have always understood that in the case of 5-grain pills the weight of the coating should not exceed a grain, and that a good coating weighs little more than half a grain. From this we should take 2 oz. per lb. to be the average increase for 5-grain pills, and for 3 and 4 grains the increase will be greater.

114/8. *Alpha*.—**Toilet Vinegar**:—

Oil of lavender	4 minims
" rosemary	4 "
" juniper	4 "
" peppermint	4 "
" cinnamon	4 "
" lemon	8 "
" cloves	8 "
Rectified spirit	3 oz.
Acetic acid	4 "
Water to	16 "

Dissolve the oils in the spirit, add the acid and water. Shake occasionally, and in a day or two filter.

111/41. *J. M.*—**Solution for Repairing Macintoshes**.—(1) To your solution of indiarubber in mineral naphtha add some shellac, or try the following, which is said to form a very tenacious glue:—

Indiarubber (cut small)	1 part
Coal tar	4 parts
Shellac	2 "

Dissolve the rubber in the coal tar, then add the shellac and heat—apply warm.

(2) **A Black Paint** for the inside of microscope and telescope tubes is made from very fine lampblack and weak shellac or resin varnish (1 in 12).

111/39. *Senex*.—(1) The **Acetic Acid** used as a **Rubefacient** in hydropathic establishments is a little stronger than the ordinary, as it contains about 40 per cent. of the real acid. (2) **Liq. Ferri et Manganis Phosph.**:—

Sulphate of iron	168 grains
Sulphate of manganese	113 "
Phosphate of soda	247 "
Acetate of soda	93 "
Distilled water, a sufficiency	
Glacial phosphoric acid	6 fl. drachms.

Dissolve 150 grains of the phosphate and 56 grains of the acetate of soda in 2 oz. and the sulphate of iron in 6 drachms of warm water; mix the solutions and allow to cool. Collect and wash the precipitate thoroughly. In a similar manner prepare phosphate of manganese from the remainder of the soda salts and the sulphate of manganese. While still moist dissolve the precipitates in the glacial acid, filter, and make up to 2 oz. with distilled water. (It is advisable to free the precipitates from superfluous water by slight pressure, as they are capable of retaining much more than their own weight.) The resulting liquor is to be diluted with 5 times its volume of syrup to make the syrup—each fluid drachm of which would represent $\frac{3}{4}$ gr. of ferrous phosphate and $\frac{1}{2}$ grain of manganous phosphate.

111/27. *H. H.*—Your **Antiseptic Preservative** is the usual boric compound—probably boric acid, 1 part; borax, 2 parts.

112/25. *A. B. C.*—**Boracic Acid as a Preservative for Beer**.—The acid would dissolve if put in dry, although it would take a little time. You would require about 4 oz. for 36 gallons. A solution in glycerine might be used, although the glycerine is of no advantage. The solubility of the acid in beer is about 1 in 24; 36 gallons of beer should, therefore, dissolve nearly 12 lbs. If you were to dissolve that quantity in glycerine, and add the solution to beer, it might be precipitated, but would afterwards dissolve.

111/6. *J. N. T.* wishes a formula for a liquid preservative that is effectual in the proportion of two tablespoonfuls for 50 gallons of horehound beer. [We presume he wishes it to add to the extract of herbs. Try a saturated solution of salicylic acid in alcohol; or saturate a solution of borax in equal parts of water and glycerine with salicylic acid, by means of heat. An ounce of the resulting solution may be added to every gallon of the extract.]

113/66. *Bovril*.—"Oliver's Urine Testing" (3s. 6d.) is considered a very good book on urine analysis.

114/7. *Botany*.—The best books on botany for Minor students are "Cooke's Structural" (1s.), "Bentley's Structural" (7s. 6d.), or Silver's "Outlines of Botany" (5s.). You will be able to obtain any of these through the booksellers who advertise in this journal, or through the Exchange column.

109/15. *Tweedside*.—Your **Hair-wash** seems to be the usual sulphur and lead lotion perfumed with oil of rose geranium; try:—

Lac. sulphur.	3j.
Plumbi acet.	3j.
Glycerini	3iij.
Ol. ros. geran.	℥ij.
S. V. R.	3ij.
Aque ad	3iv.

M. S. A.

108/28. *A. R.* finds a difficulty in obtaining a **Gingerade** that will remain clear when bottled. He mixes the soluble essence, burnt sugar, citric acid, and syrup, allows them to stand for a day or two before adding to the water, but notwithstanding this it becomes quite muddy. [We observed the same difficulty some years since, especially where burnt sugar was used as a colouring agent along with citric acid. Some soluble essences are made with chloride of calcium and phosphate of soda; if lime were left in it that might tend to come down. You might try phosphocitric acid, or apply to the makers of the essence for a suitable colour.]

111/7. *Dum Spiro Spero*.—(1) The only source of **Musk** is the musk deer. A similar odour is common to some animals and vegetables, but there is no musk-bearing fish that we know of. (2) **Sticky Fly-gum**.—Soft gum thus, 4 oz.; linseed oil, $1\frac{1}{2}$ oz. or q.s.; honey, 1 oz. M. S. A. Use more oil if too hard.

113/53. *Ernst*.—(1) You can only get rid of the odour of a macintosh by exposing it to the air; it takes a long time. (2) **For Sea-sickness** take cocaine pastilles for a day (one every four hours) before going on board. When on board lie on the back whenever the weather is rough or when there is any inclination to nausea. Antipyrin, dilute hydrocyanic acid, morphine, bismuth subnitrate, potassium bromide, and many other remedies have been recommended. All are doubtless useful, but there is nothing to equal the reclining position, especially after meals.

113/35. *H. Scott*.—We gave two formulæ for lime-juice and glycerine in the **DIARY**, both of which yield excellent preparations. We also published an ingenious formula for an inseparable cream July 21, 1888, page 88.

112/21. *Orfila* (Madrid) wishes to know our opinion of the ferrous glycerites an account of which appeared in this journal, vol. xxxiv. page 504; whether any bad results are likely to arise by continuing their use for a lengthened period; if good in cases of diabetes and in strumous affections; if the preparations are permanent. [Mr. C. Arthur, of the Royal Infirmary, Edinburgh, the author of the paper, informs us that they keep well, are elegant in appearance, and are not so apt to derange the digestion as the syrups, which is a great recommendation in strumous cases. He says, in such cases they suit admirably, and as they do not contain sugar they form the best means of administering suitable medicines in diabetes; they taste more acid than the syrups, and are favourably spoken of.] The same correspondent would like to remove the phosphorus from 20 kilos. of phosphorised cod-liver oil which he has. This cannot be done economically.

112/36. *Dec. Aloes Co.*—(1) We have no idea. (2) *Dec. Aloes Co. Concent.* (1 in 4).—Extract of socotrine aloes, 2 oz.; myrrh and carbonate of potash, of each, 1 oz.; extract of liquorice, 8 oz. Digest in a pint of hot water for two hours, stirring well occasionally; then allow to cool. Add 1 pint of rectified spirit, 1 oz. of saffron, the solid ingredients for 3 pints of compound tincture of cardamoms, macerate for seven days, press and filter, making up the product to 50 oz. with proof spirit.

109/14. *Bon Accord*.—A well-made silver marking-ink, if sufficiently thickened with gum, can be used with metallic stamps.

113/90. *A. W.*—*White Heliotrope*.—(1) Try the following:—Oil of bitter almonds and otto of rose, of each, 15 minims; vanillin, 10 grains; oil of neroli, 2 minims; essence of ambergris, 2 oz.; rectified spirit, 13 oz.; water, 1 oz. Mix. (2) *German Brass Paste*:—

	Parts
(1) Oxalic acid	1
Ferric oxide	25
Tripoli	20
Palm oil	60
Soft paraffin	4
Mix.	
(2) Oleic acid	½ oz.
Lard	1½ "
Jewellers' rouge	½ "
Powdered emery	¼ "
Powdered rotten stone	1 "
Oil of mirbane	1 drop
Mix.	

116/58. *C. B.*—Your sample of eau de Cologne is not like the foreign; it contains too much lavender.

114/66. *Thistle* asks if the following lotion is good for *Roughness of the Skin, Lips, &c.*:—

	Parts
Glycerine	8
Sulphurous acid	6
Rose water	6
Cochineal colouring, a sufficiency	

The only objection to this lotion is that it is too strong in sulphurous acid, 3 parts are enough, and that omitted should be replaced by elder-flower water. The lotion should not be used for the lips, but it is excellent for the skin.

113/24. *Strychnia*.—(1) We cannot explain the circumstance. Was the vermin-killer properly mixed? How do you know that it did not kill the outdoor mice? (2) You will find the dental information in Hunter's "Mechanical Dentistry" (Crosby Lockwood, 7s. 6d.).

115/68. *W. & S.*—You will find directions for perfuming theatres in our issues of May 18 and 25.

115/53. *East Anglia*.—*Vanillon* is a wild vanilla of inferior flavour. You may use vanilla instead in any perfume formulae.

114/52. *J. H. W.*—We understood that we replied to your letter. Antipyrin has a very depressent influence upon some individuals; indeed, the symptoms which sometimes follow small doses are most alarming. In the case of your lady customer we would attribute the primary effects to the antipyrin, but the symptoms were undoubtedly aggravated by the stout. We do not think that the saline would interfere.

113/33. *Bos*.—There is a description of a *Macero-percolator* in our 31st volume, page 552; but it is really unnecessary in percolation to trouble much about the vessel in which maceration is to take place. Before you can percolate properly you must thoroughly soften the drug by moistening with at least its own weight of the menstruum; then at the end of from three to six hours pack in the percolator and pour menstruum on it so as to leave the inch above the surface covered with the menstruum. Close and cover the percolator, and set aside for a day or two. This ensures efficient maceration, and the process of percolation does the rest. Try one of Toogood's percolators, which are good and cheap.

A Modest Manager.

A chemist, who desires to remain anonymous, took a branch business and engaged a manager for it. He asked this gentleman to draw up a circular to announce the change of proprietorship, and the resulting manuscript he sends for our amusement. The proposed announcement was headed "Special and Important Notice to the Public!!!" and went on to state that Messrs. So-and-so had taken over Mr. Blank's old-established business, and "hasten to assure the inhabitants of the neighbourhood and elsewhere that they intend to continue to use their utmost endeavours to secure a continuance of liberal support, having engaged a 'reliable manager' who has for over twenty years been constantly occupied in the practice of medicine, as private, club, parochial, visiting, prescribing, vaccination, and dispensing assistant to various medical men of high standing and large connection. He is enabled to bring to the aid of pharmacy an abundance of most valuable resources; accustomed to the treatment of all kinds of diseases, can, and do confidently proffer his advice in those early stages of sickness, where a little attention often times obviates the unfortunate necessity of a tedious confinement resulting in expensive professional attendance, as well as in the common and constantly occurring maladies of women and children. Intimately acquainted with the nature of all acknowledged remedies, he is enabled to measure their value, determine their action, and prescribe their use with much more than common confidence.

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"The diseases of women and children especially attended to. Also skin diseases, &c."

A REMARKABLE statement was made, publicly, and on oath, in the course of the Maybrick case. We quote from the *Sunday Times* of August 4. Dr. Thomas Stevenson, Lecturer on Forensic Medicine and Chemistry at Guy's Hospital, London, in the course of his cross-examination by Sir Charles Russell said: "He constantly saw cases of accidental over-dosing with arsenic in the hospitals." Hospitals will come to be in need of patients, as well as of adequate funds, if such admissions as this continue to be made.—*Zoophilist*.

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USES.—INTERNALLY: In Dyspepsia and Gastralgia. Geo. Herschel, M.D. Lond., writes in the *British Medical Journal*, April 3rd, 1886:—"I find it chiefly valuable in (1) the Chronic Stomach Catarrhs of Children, (2) Acid Dyspepsia, and (3) Severe Gastric Pain coming on shortly after eating." Recent experiments made by Prof. Finkler, and published in *The Lancet*, July 23rd, 1887, show that Papain digests far more energetically than best Pepsin, when the solution is concentrated as it exists in the human stomach.

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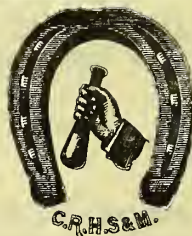
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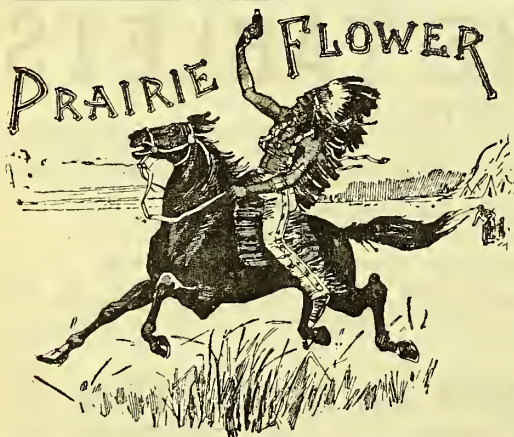
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2/9..Aubergier's Syrup	26/3	4/6.. " Mathey Caylus	27/	11/.. " Pills	91/10	4/0..Racabout	31/
2/9.. " Pâte	15/4	4/6..Chassaing's Wine	38/9	2/3..Papier Fayard	13/6	4/6..Reynal's Bougies	37/10
6/6..Bay Rum	57/	2/9.. " Pills	24/4	1/11..Ditto	7/3	2/9..Ricord's Injection	24/4
6/6..Ditto	31/	4/6..Clin's Bromide Cam. Dragées	45/	4/..Papier Fruneau	24/4	4/6.. " Capsules	36/
2/..Belloc's Charcoal	15/4	5/..Eau Botot (Genuine)	40/1	2/3..Ditto	14/5	9/.. " Syrup	90/; 4/6; 42/
1/9.. " Lozenges	14/5	3/..Ditto	24/4	1/9..Pâte Aubergier	15/4	1/6..Star Paper	11/
4/6..Blancard's Pills	32/5	2/6..Espic's Cigarettes	13/6	1/9.. " de Berthé	15/4	2/9..Vallet's Pills	22/6
2/6..Ditto	18/	6/..Elixir de Coca	56/9	2/9.. " de Coca	24/4	1/9..Ditto	14/5
8/..Bron's Injection	27/	2/9..Flon's Syrup	22/6	2/9.. " de George	14/5	4/6..Veloutine (White, Pink, Yel.)	37/1
8/..Bugeaud's Wine	36/	2/..Gayetty's Paper	15/4	1/11.. " Ditto	9/	3/6..Ditto ditto	27/
4/..Bully's Vinegar	32/5	2/3..Granules Arsen. Acid	13/6	1/6.. " de Nalé	13/6	2/9..Vichot's Trochisques	21/8
2/..Ditto	16/3	2/9.. " Iron	14/5	1/9.. " Regnaud	14/5	4/6..Valentine's Meat Juice	38/
4/6..Candé's (Lait Antéphilq.)	39/8	2/9.. " Soda	15/4	7/..Pierlot's Valerian	59/5	4/6..Vin de Coca Mariani	39/8
4/6..Capsules Bromide Camph.	45/	2/9..Grimault's Syrup Lime	23/5	2/9..Rabuteau's Dréges Ferrug	24/4		

Special Quotations in large quantities.

MM. Roberts & Cie. ont l'honneur d'informer MM. les Pharmaciens Spécialistes de France et de l'Etranger qu'ils se mettent à leur disposition pour des dépôts qu'ils voudraient établir à Londres. On peut avoir tous renseignements en s'adressant à leur maison de Londres ou à Paris.

SPECIAL AGENTS FOR MARIANI'S ELIXIR, EXTRACT PATE, PILLS, SYRUP AND WINE OF COCA, AND FOR VALENTINE'S MEAT JUICE AND LE GRAND'S ORIZA PERFUMERY.

Established]

House in Paris: ROBERTS & CO., Rue de la Paix 5.

[1823.

41

WITHOUT A RIVAL!

From the time Medicine was first discovered by the Ancients down to the present none ever made such progress as

BEECHAM'S PILLS.



They stand without a rival, and have by far the largest sale of any Patent Medicine in the World. This is a fact which every business man is bound to admit.

All Foreign Dealers will find BEECHAM'S PILLS the most Saleable Medicine in the Market.

The health-restoring and life-giving properties of these Pills are such as to increase their demand every year.

The words "BEECHAM'S PILLS, SAINT HELENS," are on the Government Stamp affixed to each box.

Prepared only and sold by the Proprietor, THOMAS BEECHAM, ST. HELENS, LANCASHIRE, ENGLAND, in boxes at 1s. 1½d. and 2s. 9d. each, with full instructions for use.

THE ORIGINAL GENUINE EAST INDIA OIL OF MUSTARD SEED

Is strongly recommended as a safe and effectual remedy in cases of RHEUMATISM, GOUT, RHEUMATIC GOUT, SCIATICA, LUMBAGO, HEADACHE, PAINS IN THE STOMACH, SPASMS, BRUISES, CHILBLAINS, &c.

RETAIL IN BOTTLES, 1s. EACH.

Imported by J. H. & S. JOHNSON, Wholesale Druggists, 6, 8, and 10 WHITECHAPEL, LIVERPOOL.
Wholesale Agents: London—Newbery & Sons, and Bourne, Johnson & Latimer

DAHL'S DYSPEPSIA CAKES,

As supplied to H.M. the Empress Eugenie.

For Indigestion and Constipation, 1s. and 2s. 6d. per box.

DAHL'S POWDERED CAKES,

For Specially Delicate Cases, 2s. 6d. per box.

DAHL'S AGENCY—41 EASTCHEAP, E.C.

SPONGE IMPORTERS.

M. PETERSON & CO.

(ESTABLISHED 1870),

75 ST. ANNE STREET, LIVERPOOL.

FOR HOME, FOREIGN, & COLONIAL MARKETS.

42

MEUPHROSINE.

THE ONLY ABSOLUTELY
SAFE AND CERTAIN
CURE FOR

SLEEPLESSNESS NERVOUS DISEASES INDIGESTION AND SPASMS.

Guaranteed to contain no Opium, Morphia, Chloral, or other injurious Narcotics; no Bromide, no Alcohol; does not disturb the brain nor depress the heart. Price 2s. 9d. and 4s. 6d.

Of all Chemists, and of the Proprietors and Manufacturers,

THE MEUPHROSINE MANUFACTURING CO.,
3 Jeffray's Square, St. Mary Axe, LONDON, E.C.

Read an Epitome on the Causes and Cure of Sleeplessness, &c., containing Medical and other Testimonials, and Analyst's Certificate (published by the above), price 6d. Given away with every bottle.

"CUTTING COUNTERACTED." MOONSEED BITTERS brings FULL PRICES. WHY?

Because every one who retails Moonseed Bitters has to sign an Agreement or Contract in the following terms:—



MOONSEED BITTERS.

Above is Facsimile of
THE WRAPPER LABEL
of the 2/9 size.
It is also sold at 4/6.

MOONSEED OINTMENT.

Retails at 1/1½, 2/9, 4/6 per box.

Memorandum of Agreement made this.....day of..... 1889, between A. E. POWELL & COMPANY, of Swindon in the County of Wilts, Proprietors of the Moonseed Bitters and Moonseed Ointment (hereinafter called the "Vendors"), of the one part and of (hereinafter called "the Purchasers"), of the other part.

Whereby it is mutually agreed between the said parties hereto as follows:—

In consideration of the Vendors selling to and supplying the Purchasers with Moonseed Bitters, Moonseed Ointment, and other preparations manufactured and sold by them (hereinafter termed "the Goods") at their usual prices, the Purchasers will observe and perform the following terms and conditions:—

1. The Purchasers to sell the Goods retail for full printed prices only, and for each and every Bottle or Box of Moonseed Bitters, Ointment, or Pills sold by him or them at any less price, without the written consent of the Vendors, the Purchasers shall pay to the Vendors the Sum of Twenty Shillings in the nature of a penalty, to be recoverable as ascertained liquidated damages.

2. The Purchasers not to supply any Wholesale House nor to sell the Goods wholesale to any Chemist or Druggist or Medicine Vendor who will not previously enter into an Agreement to retail the same at prices in accordance with the preceding Clause No. 1 of these presents.

All Purchasers who have signed a similar form of Agreement to the foregoing will be supplied upon the Vendors' usual trade terms, but those Purchasers who do not sign a similar form of Agreement to be supplied upon the following terms only, namely:—RETAIL, 4s. 5d. for each and every 4s. 6d. Box or Bottle, 2s. 8d. for each and every 2s. 9d. Box or Bottle, and 1s. 0½d. for each and every 1s. 1½d. Box or Bottle—net in all cases. WHOLESALE, 4s. 4d. for each and every 4s. 6d. Box and Bottle, 2s. 7d. for each and every 2s. 9d. Box or Bottle, and 11½d. for each and every 1s. 1½d. Box or Bottle—net in all cases. This Agreement and the terms and conditions herein contained to remain in full force and virtue for the term of 7 years from the first day of March, 1889.

As witness the hands of the said parties hereto the day and year first above written.

We call attention to the important steps which we have taken to prevent our specialities being retailed at less than the advertised prices, and we ask the co-operation of the Trade in maintaining the integrity of the scheme whereby the sale of our preparations may always be retained by the legitimate trade. We will not only endeavour, by all means in our power, to prevent the advertised prices being "Cut," but will give Chemists every assistance and facility for making this a large as well as a paying business.

Please write for Terms and Form of Agreement. NOTE that we allow retailers of Moonseed Bitters 2s. 6d. per thousand for the Distribution of Pamphlets.

A. E. POWELL & CO., SWINDON.

Dr. J. COLLIS BROWNE'S CHLORODYNE.

THE ORIGINAL AND ONLY GENUINE.

IMPORTANT CAUTIONS

From Lord Chancellor SELBORNE, Vice-Chancellor Sir W. PAGE WOOD,
and the LORDS JUSTICES OF APPEAL.

VICE-CHANCELLOR SIR W. PAGE WOOD, by whom the suit in Chancery was first heard, stated in his judgment that 'Dr. J. Collis Browne was undoubtedly the Inventor of Chlorodyne, that the whole story of the Defendant Freeman was as deliberately untrue as the falsehood he had deposed to with reference to the use of his Chlorodyne in the Hospital.'

The VICE-CHANCELLOR also stated, 'that Chlorodyne was a fanciful name, and had application been made sooner, the Court would have given Dr. Browne protection.'

LORD CHANCELLOR SELBORNE coincided with the judgment of the Vice-Chancellor upon this point, and stated 'that had application been made at a proper time and place, the Court would have found means to restrain the Defendant from misrepresenting the decision of the Vice-Chancellor.'

LORD JUSTICE JAMES, on appeal, stated in his judgment, 'that the Defendant Freeman had made a deliberate misrepresentation of the decision of Vice-Chancellor Wood.'

It was proved in Court, on affidavit by Mrs. Forbes, of Paris, that the testimonial published in the *Times*, November 14th, 1865, speaking of the great efficacy of Chlorodyne in Cholera, referred to Dr. J. Collis Browne's Chlorodyne, and that she never used any other, that she had written to the Defendant Freeman to that effect; notwithstanding which notice the Defendant publishes the said testimonial as referring to his medicine.

The Editor of the *Medical Times*, in his report on Chlorodyne, January 13th, 1866, gives information that the Chlorodyne referred to was the medicine introduced by a retired Army Medical Officer, which was Dr. J. Collis Browne; still this is published by the Defendant as testimony to his medicine.

Numerous affidavits from eminent Physicians and others were produced in Court, stating that Dr. J. Collis Browne was the Inventor of Chlorodyne, and that when prescribing they mean no other.

The Defendant himself publishes that his compound is in effect and composition quite different to any other preparation; nevertheless he assumes the name, testimonials, &c., of Chlorodyne.

Technicalities in law prevent that protection which the public should justly have against such a course of conduct. It is now incumbent on all who purchase Chlorodyne to see that the name, 'Dr. J. Collis Browne's Chlorodyne,' is engraved on the Government Stamp, as it is not sold otherwise. All other compounds under the name of Chlorodyne are spurious. All attempts at analysis have failed; hence the statement that the constituents of Chlorodyne are known is a misrepresentation.

ORIGINAL AND



ONLY GENUINE.

FURTHER IMPORTANT NOTICE.

The subjoined list of eminent Firms concur with Vice-Chancellor Sir W. Page Wood's statement in Court, that Dr. Collis Browne was undoubtedly the Inventor of Chlorodyne; and that when Chlorodyne, or the Original Chlorodyne, is ordered, they invariably supply Dr. J. Collis Browne's:—

Apothecaries' Hall,	London	Frazer & Green,	Glasgow	Morson, T., & Son,	London
Allen, Hanbury & Co.,	"	Gale & Co.,	London	Newbery & Sons,	London
Baiss Brothers,	"	Giles & Son,	Clifton	Oldham, G., & Co.,	Dublin
Banks & Richards,	Birmingham	Goulding, Messrs.,	Cork	Parsons & Richardson,	Leicester
Barron, Harvey & Co.,	London	Gratton & Co.,	Belfast	Peake, Allen & Co.,	Dublin
Bell, John, & Co.,	"	Grimwade, Ridley,	London	Raines & Co.,	York
Bourne & Taylor,	"	Grindley & Son,	Chester	Raines & Co.,	Edinburgh
Corbyn & Co.,	"	Hearson, Squire & Francis,	London	Sang & Barker,	"
Cox & Gould,	"	Hodgkinson, Tonge & Stead,	"	Sanger, J., & Sons,	London
Curling & Co.,	"	Hopkins & Williams,	"	Sim, James, & Co.,	Aberdeen
Curtis & Co.,	"	Hovenden, R., & Sons,	"	Simston, W.,	Leeds
Davy, M'Murdo & Co.,	"	Hunt & Co.,	Exeter	Southall & Co.,	Birmingham
Dobbin, W., & Co., Limited	Belfast	Hunt, A., & Co.,	"	Sutton, W., & Co.,	London
Drew, Barron & Co.,	London	Johnson, J. H. & S.,	Liverpool	Tomlinson, Hayward & Co.,	Lincoln
Drew, B., & Alexander,	"	Langton, W., & Co.,	London	Treacher, Hodgkinson & Co.,	London
Dunn & Company,	"	Lynch & Co.,	"	Westrup, J. B.,	Kensington
Edwards, W.,	"	Mander, Weaver,	Wolverhampton	Westwood & Hopkins,	London
Evans, Gadd & Co.,	Exeter	Marsden & Sons,	London	Woolley, James,	Manchester
Evans, Lescher & Webb,	London	Maw & Son,	"	Wyles & Brown,	Coventry
Ferris & Co.,	Bristol	Meggison & Co.,	"	Yates & Co.,	London
Foulger, S., & Son,	London	MacKay, John, & Co.,	Edinburgh		

After these public statements in a Court of Equity, and subsequent confirmation by the trade at large, no Chemist can conscientiously use or sell any other compound for Chlorodyne without committing a breach of faith, unjust to patient and physician. The value of the remedy alone creates the great demand.

Sold in Bottles—1s. 1½d., 2s. 9d., 4s. 6d., and 11s. Usual Discount to the Profession.

SOLE MANUFACTURER,

J. T. DAVENPORT, Pharmacist,

38 GREAT RUSSELL STREET, BLOOMSBURY SQUARE, LONDON.

BATHING CAPS

In great variety, from 5/6 per Dozen.

SPONGE BAGS.

BEST QUALITY ONLY.
No. 1 2 3 4 5 6 7 8
3/9, 4/9, 6/3, 7/6, 9/-, 10/3, 12/- 13/6 per Dozen.

PADDLING DRAWERS, 18/- per Dozen.

F. SCHUTZE & CO., 36^A ALDERSGATE STREET.

LINT.

GAMGEE TISSUE.

(PATENT ABSORBENT GAUZE AND COTTON WOOL.)

ABSORBENT COTTON WOOL.

ROLL BANDAGES.

ROBINSON & SONS,

COTTON SPINNERS AND MANUFACTURERS OF

SURGEONS' LINTS, COTTON WOOLS,
AND BANDAGES,

WHEAT BRIDGE MILLS,
NEAR CHESTERFIELD.

Depot—55 Fann Street, Aldersgate Street, London.



TRADE MARK.

SEAMLESS SPIRAL STOCKINGS

Knee Caps, &c., Patent 4,682. No Seams to irritate the Heels and Feet.

Stockings, &c., with "H" woven in the top and all articles stamped "H" are Guaranteed as being of Good Quality.

Inventor and Manufacturer of

SURGICAL ELASTIC STOCKINGS

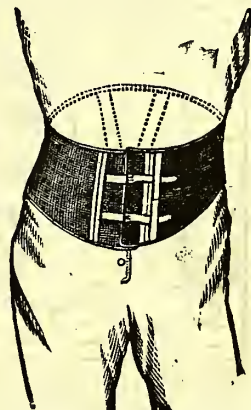
OF ALL KINDS.

EXCELSIOR TRUSS. Registered, No. 20,384.

GREAT IMPROVEMENT OVER ALL TRUSSES WITHOUT SPRING IN BAND.

SPIRAL LOOM STOCKINGS,

Made from continuous piece of web sewn together.



LADIES' AND GENTLEMEN'S BELTS.

ZEPHYR STOCKINGS,

Light make, for summer wear. TRUSSES OF ALL KINDS.

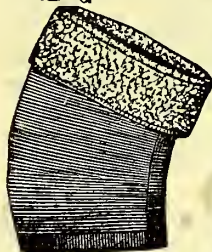
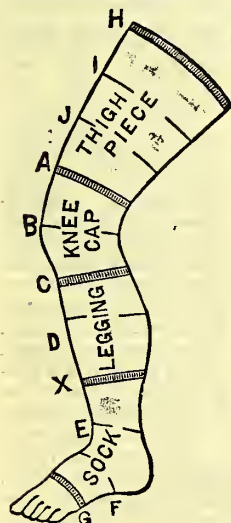
Bath Gloves, Holdfast, Registered. Lawn Tennis Cuffs. Anti-rheumatic Knee Caps. Suspensory Bandages. Ladies' and Gents' Belts. Trusses and Belts for Bathing Athletic Supports for Wrists, Elbows, Knees, and Ankles. Magnetic Appliances, Chest-Expanding Braces, Stocking Suspenders, Druggists' Sundries. Lists on application.

PATENT PILE SURGICAL STOCKINGS, &c.

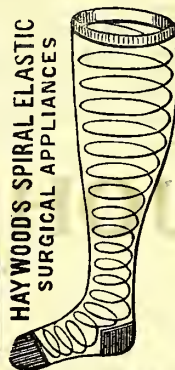
PROTECTED, No. 14,618.

THIS Invention consists in raising a Pile or Fleece of a Velvety character upon the inside of Surgical Appliances, as Stockings, Knee Caps, Belts, Elbow and Shoulder Pieces, &c., which, lying over the Cords of Indiarubber, effectually prevents them indenting the Limb, and produces an equal and more comfortable pressure upon the swollen veins, without effecting the elasticity.

J. H. HAYWOOD, CASTLE GATE, NOTTINGHAM.



Patent Pile, Protected, 14,618. The Pile lying over the Indiarubber Cords, protecting them and forming a smooth soft surface to the limb.

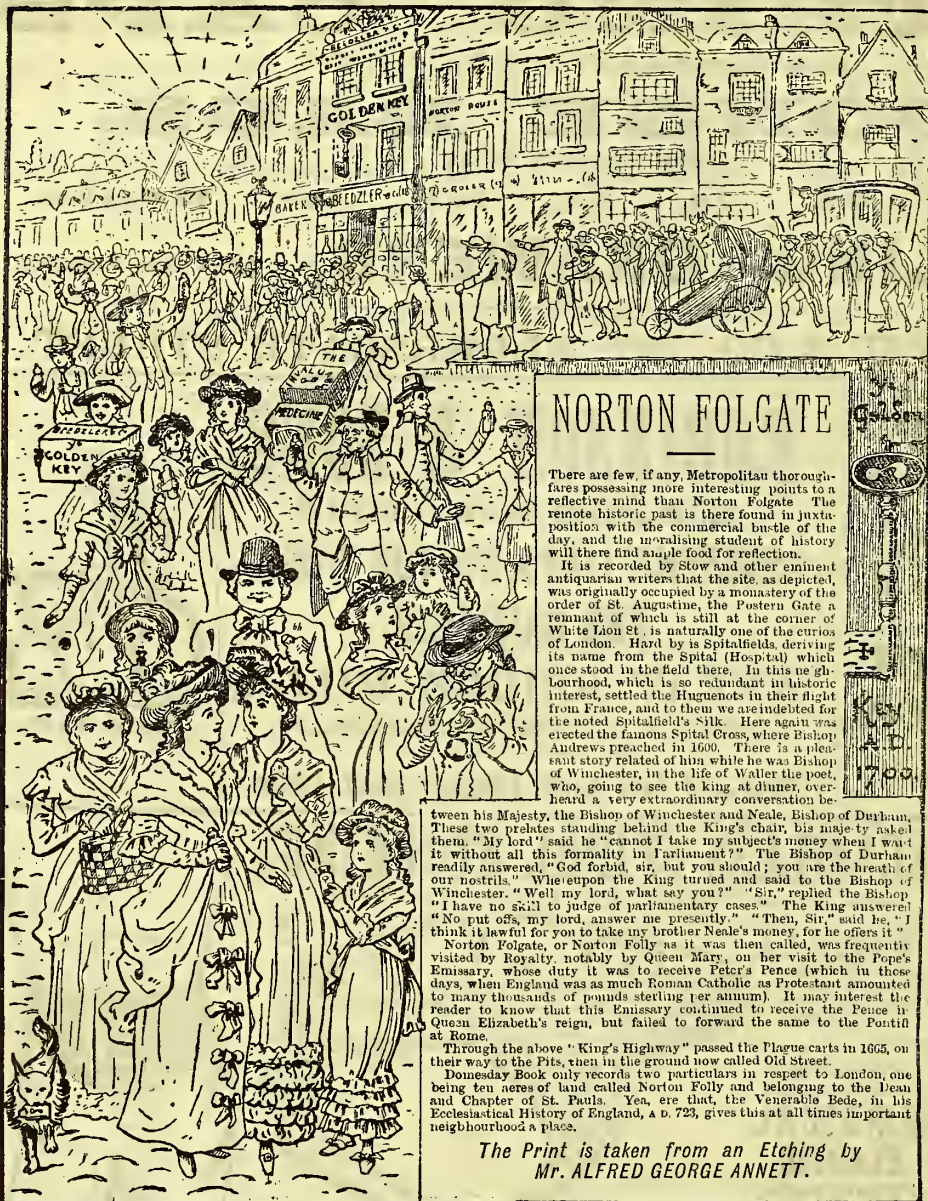


PATENT 4,682 (Seamless).

DYNAMITE SCARE AT ACTON.

Vide THE COUNTY OF
MIDDLESEX INDEPENDENT,
Nov. 3th.

ABOUT a week ago a plain deal box addressed to the "Inspector in charge" was duly delivered by the Parcels Delivery Company to Mr. Inspector Swords at the Acton Police Station. In these days of dynamite and such other pleasant novelties, the police have been taught to be cautious, and it was deemed prudent to keep the box unopened for two or three days whilst waiting instructions. However, it suddenly dawned upon the mind of one intelligent Officer that "murder was in the air," and that the opening of that box would lead on to discovery and—promotion. A Council of War was held, and it was decided that Inspector Swords should unravel the mystery by opening the box. The Inspector went cautiously but boldly to work, whilst the terror depicted on the faces of some of those present is described as being intense, but it was still more intense when the lid was fairly raised, and they beheld a number of those deadly weapons of destruction—cartridges. Down went the lid again with a bang, and a telegram was about to be



NORTON FOLGATE

There are few, if any, Metropolitan thoroughfares possessing more interesting points to a reflective mind than Norton Folgate. The remote historic past is there found in juxtaposition with the commercial bustle of the day, and the moribund student of history will there find ample food for reflection.

It is recorded by Stow and other eminent antiquarian writers that the site, as depicted, was originally occupied by a monastery of the order of St. Augustine, the Postern Gate a remnant of which is still at the corner of White Lion St., is naturally one of the curios of London. Hard by is Spitalfields, deriving its name from the Spital (Hospital) which once stood in the field there. In this neighbourhood, which is so redundant in historic interest, settled the Huguenots in their flight from France, and to them we are indebted for the noted Spitalfields Silk. Here again was erected the famous Spital Cross, where Bishop Andrews preached in 1600. There is a pleasant story related of him while he was Bishop of Winchester, in the life of Walter the poet, who, going to see the king at dinner, overheard a very extraordinary conversation between his Majesty, the Bishop of Winchester and Neale, Bishop of Durham.

These two prelates standing behind the King's chair, his majesty asked them, "My lord," said he "cannot I take my subject's money when I want it without all this formality in Parliament?" The Bishop of Durham readily answered, "God forbid, sir, but you should; you are the breath of our nostrils." Whereupon the King turned and said to the Bishop of Winchester, "Well my lord, what say you?" "Sir," replied the Bishop, "I have no skill to judge of parliamentary cases." The King answered, "No put off, my lord, answer me presently." "Then, Sir," said he, "I think it lawful for you to take my brother Neale's money, for he offers it."

Norton Folgate, or Norton Folly as it was then called, was frequently visited by royalty, notably by Queen Mary, on her visit to the Pope's Embassy, whose duty it was to receive Peter's Pence (which in those days, when England was as much Roman Catholic as Protestant amounted to many thousands of pounds sterling per annum). It may interest the reader to know that this Embassy continued to receive the Pence in Queen Elizabeth's reign, but failed to forward the same to the Pontiff at Rome.

Through the above "King's Highway" passed the Plague carts in 1665, on their way to the Pits, then in the ground now called Old Street.

Domesday Book only records two particulars in respect to London, one being ten acres of land called Norton Folly and belonging to the Dean and Chapter of St. Paul's. Yea, ere that, the Venerable Bede, in his Ecclesiastical History of England, A.D. 723, gives this at all times important neighbourhood a place.

The Print is taken from an Etching by
Mr. ALFRED GEORGE ANNETT.

despatched to Scotland Yard, when the "happy thought" struck the inspector that cartridges are innocent things in themselves, and that even if clockwork or some other ingenious mechanism had been inserted in the box to cause an explosion, it had either run down, or had never been wound up, or they would all have been in eternity long ago. He once more raised the lid and proceeded to examine one of the supposed cartridges. The first wrapper was taken off. Silence reigned supreme, and the terror was deeply intensified. The second wrapper was unfolded. The terror was now extreme, as, exposed to view, they saw not a cartridge, but a bottle filled with a dark suspicious looking fluid, labelled with this inscription, "To be taken every two hours whilst the cough is troublesome." The agony ceased and hilarity prevailed. The murder was out. An enterprising Firm in Norton Folgate (J. Beedzler & Co.) have patented "ANNETT'S COUGH BALSAM," and the box contained a bottle of the Mixture for each officer attached to the Acton Station. We will only express the hope that the Mixture may effect as great relief when taken according to the directions to counteract the effects of the present foggy weather as was experienced by the whole of the men present when the contents of that box became known.

JOHN BEEDZLER & CO.

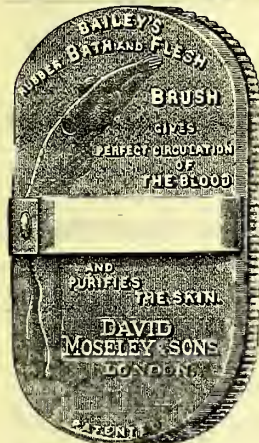
WHOLESALE AND RETAIL CHEMISTS,

18 NORTON FOLGATE, E.C.

(Opposite Worship Street, and near the Bishopsgate Low Level Station.)



BAILEY'S RUBBER BRUSHES.



Our Bath and Flesh Brushes have been so well received by the trade, and have met with such ready sale, that it is unnecessary for us to say anything in praise of them here. We shall continue to make them of the very best quality of rubber obtainable, and, as we are advertising them largely, we have every confidence that they will continue to sell well.

PRICE

(in neat metal cases and with wood handles),
£2 2s. per dozen.

CLEAN HANDS.



Nothing has ever been invented that will so thoroughly cleanse and whiten the hands as our rubber brushes. Used with soap and water they will remove all kinds of stains without injuring the most delicate skin. They are made of the best Pará Rubber, and will last for years.

Price 1s., 2s., and 2s. 2d. each retail, or 8s., 17s., and 18s. per dozen.



We are just now introducing our tooth brushes. They are made in two sizes, of the best rubber, and are certain to give satisfaction. For cleaning artificial teeth they have no equal. Our prices are 6s. and 6s. 6d. per dozen. Samples at the dozen prices will be sent to any chemist who may wish to see what the goods are like. The brushes will speak for themselves.

PRICE LISTS, AIR GOODS, WATER BOTTLES, SPONGE BAGS, ELASTIC BANDAGES, &c., UPON APPLICATION.

DAVID MOSELEY & SONS, { 14 Aldermanbury Ave., LONDON, E.C.; Ardwick, MANCHESTER
MANUFACTURERS, 57 Miller Street, GLASGOW; BRUSSELS and PARIS.



The Chemist and Druggist says:—Mr. Arthur W. Shirley has produced a very attractive biscuit china figure, represented in the annexed engraving. The advertisement is effective without being at all vulgar, and the little orier, we expect, will soon be a familiar figure about the country.

THIS ELEGANT BISCUIT-CHINA FIGURE, AN ORNAMENT TO ANY SHOP.

GIVEN AWAY

To Purchasers of 25/ worth of

SHIRLEY'S A1 BRAND MENTHOL

OR TWO IF 40/ ORDER IS PLACED.

The following special parcels have been arranged to suit all classes of trade:—

PARCEL 1. 25/.	PARCEL 2. 25/.	PARCEL 3. 25/.	PARCEL 4. 25/.
4 doz. 2d. 1 doz. 3d.	4 doz. 6d.	3 doz. 3d.	1 doz. 9d.
2 doz. 3½d. 3 doz. 4d.	2 doz. 4d.	2 doz. 1s.	2½ doz. 1s.
2 doz. 6d.	1 doz. 1s.	1 doz. 4d.	¾ doz. 1s. 6d.
PARCEL 5. 40/.	PARCEL 6. 40/.	PARCEL 7. 40/.	PARCEL 8. 40/.
4 doz. 2d. 2 doz. 3d.	5 doz. 6d.	4 doz. 6d. 4 doz. 4d.	4 doz. 1s.
3 doz. 3½d. 5 doz. 4d.	3 doz. 4d.	1 doz. 9d. 2 doz. 1s.	2 doz. 9d.
4 doz. 6d.	2½ doz. 1s.		¾ doz. 1s. 6d.

By calculating what each of the parcels would realise when sold, it will be found that they yield an average profit of 80 per cent. to the retailer on his outlay.

The following Patterns can be well recommended as Saleable:—

No.	Pattern	Doz.	No.	Pattern	Doz.
No. 6.	Boxwood Pedestal, printed directions	3/6	No. 111.	Large Boxwood Acorn, plain box	7/0
" 11A.	" " " "	3/0	" 112.	Boxwood Draughtsman " "	3/3
" 14A.	" " " "	6/3	" 113.	" Cartridge " "	3/6
" 17s.	Draughtsman " "	3/9	" 113.	" " reversible " "	3/6
" 17L.	" " " "	6/6	" 107.	Willow Pedestal, varnished white	2/3
" 17L. Ebony	" " " "	6/6	" 109.	" " large " "	2/6
" 100.	2d. Willow Round Box	13/ grs. 1/5	" 110v.	1d. Vase Shape, 3 doz. on card	gross 7/0
" 101.	3d. " Acorn, 2 dz. on card	17/ " 1/10			

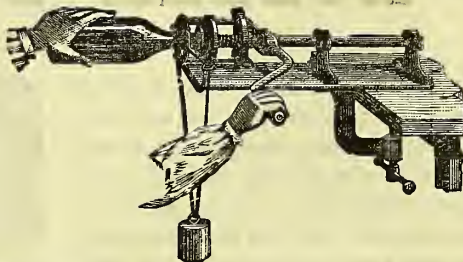
Buyers' own names printed on Boxwood Cases if desired—this being a permanent advertisement, bound to increase sales.

ARTHUR W. SHIRLEY, 30 PATERNOSTER SQUARE, LONDON, E.C.

And 11 & 12 ROSE STREET, NEWGATE STREET, E.C.

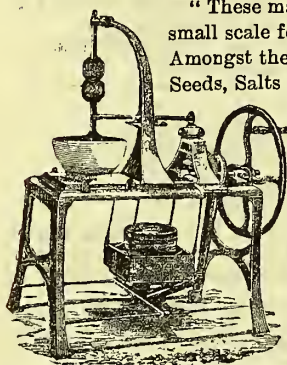
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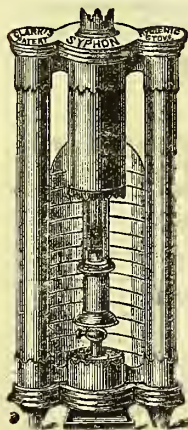
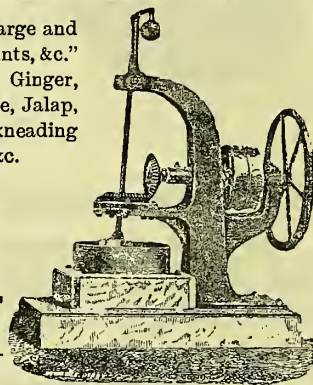
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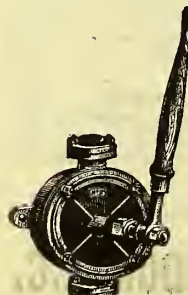
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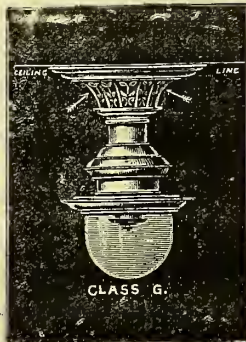
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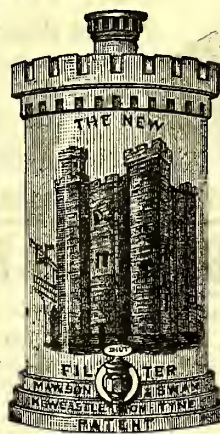
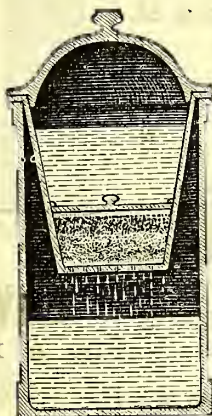
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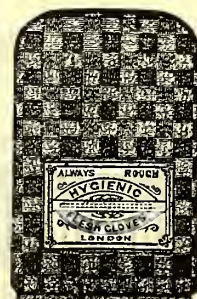
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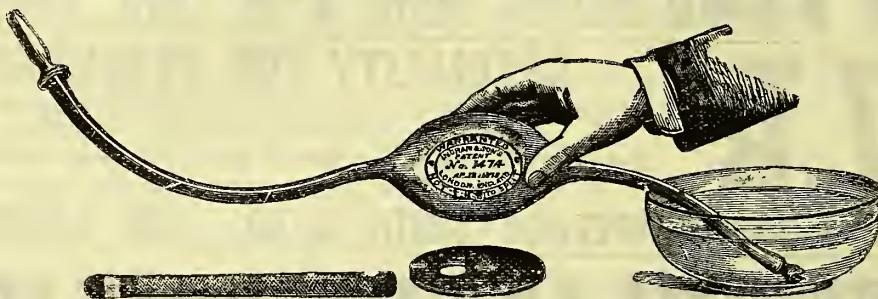
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Favourably noticed in "British Medical Journal," December 13, 1879; in the "Lancet," January 3, 1880; and in "British Medical Journal," September 30, 1882.

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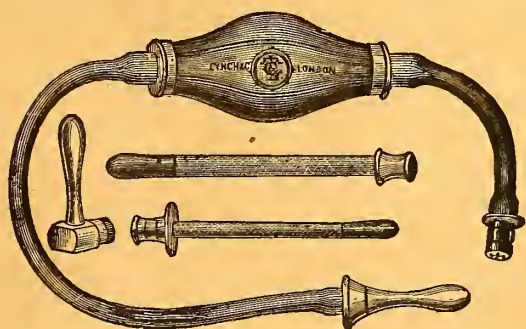
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